Mathematics

Teacher Guide

2015

Standard Based

Papua New Guinea
Department of Education

Elementary Prep

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Issued free to schools by the Department of Education

Published in 2015 by the Department of Education
First Edition

Graphic Design Layout: David Kuki Gerega

ISBN 978-9980-87-899-1

Acknowledgements

The Elementary Prep Mathematics Teacher Guide was developed by the Curriculum Development Division of the Department of Education and coordinated by Kila Tau Gima with assistance from the Subject Curriculum Group, (SCG) members.

Teachers College Lecturers, Teachers, Standards Officers and other stake holders such as Non Government Organisation are acknowledge for their contributions in the development of this Teacher Guide.

Syllabus Advisory Commitee, (SAC) and Basic Education Board of Studies, (BEBOS) Commitee members are also acknowledged for their recommendation and endorsement of this Syllabus.

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SECRETARY'S MESSAGE

The Mathematics Elementary Prep Teacher Guide is part of the new Standard Based Curriculum for Elementary schools in Papua New Guinea. This means that the study of Mathematics in Standard Based Curriculum is written to raise the standards of numeracy level in Papua New Guinea in comparison to the Pacific and elsewhere globally. This enhances the 21st Century changing and technological needs for individual's full participation and performance in the society.

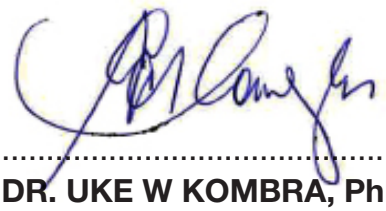
The standards stated in the Mathematics Syllabus describe what students should know, be able to do and achieve before they begin primary school. They are based on everyday Mathematics used in the community and teachers are encouraged to use resources in the community to help in their teaching.

The Teacher Guide introduces the early skills of counting, number patterns and basic number operations. It also introduces shapes, direction, time and money.

The teachers should plan their daily lessons using the examples outline in this Teacher Guide. They should also use the assessment methods and strategies for students to achieve the content standards. Teachers are required to use their understandings about Mathematics concepts and make teaching and learning fun and enjoyable for students.

English will be the medium of instruction to teach Mathematics and other subjects in all Elementary schools.

I commend and approve this Elementary Prep Teacher Guide for Mathematics to be used in all Elementary schools throughout Papua New Guinea.



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DR. UKE W KOMBRA, PhD

Acting Secretary for Education

INTRODUCTION

Mathematics at the Elementary level of schooling is based on the everyday Mathematics used in the community. When students are introduced to formal learning the known knowledge and skills of Mathematics is the foundation by which teachers take on to help students to learn the unknown knowledge and skills in mathematics. The lessons taught therefore should be playful, fun and should be used by students for their everyday living.

The Standard Based Mathematics accommodates the community Mathematics and provides opportunities for students to learn the new concepts in Mathematics and helps students to compete with their peers not only in their community but nationally,regionally and globally as well. This teacher guide for Elementary Prep provides the guided lessons that teachers will use to learn many concepts in Mathematics linking both to what students already know and what they need to learn.

How to use the teacher guide

This teacher guide is organised into sections;

- Teaching and learning strategies and approaches,
- Planning and programming
- Daily Lesson plans (scripted)
- Assessment and reporting samples
- Glossary
- Resources and Materials

You as the implementer of this teacher guide should do the following;

- Read or skim through all the sections of the book
- Then plan all lessons into yearly, weekly and daily plans as suggested according to your context
- The lessons are all numbered; therefore this should make it easy for you to insert into your teaching plans. Ensure all lessons are taught during the year
- Implement or teach the lessons according to your plans.
- Teacher and student activity - main part of the lesson for student and teacher supervising the lesson
- Conclusion and Assessment - ending off the lesson with the whole class

INTRODUCTION

ASSESSMENT AND REPORTING

In standard based curriculum assessment, the input, the process and output of the lesson and its impact on the child's learning is very important. Therefore it is important that you assess the students what they learn during introduction of the lesson, during class participations and what they learn at the end of each lesson. This can be done using checklists or observations sheets that you are familiar with or you can check what they produce and write in their books to verify your assessments of each student. Short, simple tests can be given, for example counting in 2s, 5s and 10s.

Each lesson has an assessment task at the end of the lesson and you should be able to use the assessment samples to record the progress of your student on weekly basis. These should be kept in their student portfolios. This will give you the honest assessment by the end of each term and year.

Check and link all assessment tasks to the content standards in the syllabus to ensure that the assessment tasks have met the mathematical knowledge, skills and attitudes embedded in the standards.

Modify or plan lessons that will cater for content standards that do not have the lessons

Report the progress of your students learning using the suggested samples according to your termly or yearly plans.

Time allocation

Time allocated for Mathematics is 240 minutes per week and each lesson can be taught for 60 minutes per week.

Songs and rhymes

The Mathematics lessons can start with Mathematical songs and rhymes, and starter activities to help students think in Mathematics and enjoy doing the activities. Some suggested songs are placed in the Resources part of this Teacher Guide.

Mathematical terms and resources

Teachers are required to use Mathematical terms and words as used in the lessons and prepare resources before teaching the lessons. Word lists and resources have been made for your reference.

KEY FEATURES

Curriculum principles

The Mathematics syllabus is based on three learning principles:

- children learn best when new learning is built on what they already know in their culture and home
- when children play, use real objects and solve real life problems
- when mathematics is fun, challenging and structured.

Benefits for students

When students are introduced to Mathematics in Elementary One they

- learn about mathematics at an early age .
- learn to count numbers, compare and order numbers, combine and separate numbers, measure heights, weights, lengths, make patterns and shapes and collect data using their prior knowledge and skills from Elementary Prep
- will use what they learn in Mathematics in Elementary Prep
- learn to compete with others, and enjoy to participate in Mathematics as a very important skill in their everyday lives

Catering for diversity

Many students have special needs including those who are gifted or those who are disadvantaged physically, emotionally or intellectually. Provide opportunities in the mathematics curriculum for these students so that they can participate in a variety of experiences and develop appropriate Mathematics skills. Use acceptable terms to describe people with disabilities such as students with speech, sight or hearing impairment or students with a physical disability.

Inclusive Curriculum

Students are surrounded by many situations, experiences and messages that are contained in the curriculum. Students use these to help them understand their world and form opinions about themselves and others. It is important that these messages and experiences lead students to understand that they have the right to participate in any curriculum activity regardless of their gender, ability, language group, culture or where they come from.
An inclusive curriculum:

- supports students to use their vernacular language and encourages teachers to use local materials and relate teaching to real life situations
- helps students to value and appreciate different roles, responsibilities and obligations that males and females play in their society
- values and places equal emphasis on female and male experiences in the curriculum
- recognises that students come from many different cultural and language backgrounds and caters for these differences for students from different living environment
- recognises that everyone belongs to a cultural group and all cultural groups should be treated with respect
- provides a range of learning experiences cultural activities
- allows students to appreciate, respect and participate in cultural activities from other cultures

KEY FEATURES

- promotes a safe , healthy, happy and non –threatening learning environment
- provides opportunities for students to apply problem – solving and thinking skills in a range of learning situations

Mathematics syllabus

The Standards Based syllabuses for Language, English, Culture and Community and Mathematics have the same format for Elementary.
The content of Mathematics:

- is presented in strands and topics
- the strands are same from Elementary Prep to Elementary 2
- the topics for Elementary Prep is less than Elementary 1 and Elementary 2
- the knowledge, skills, attitudes and values are written as standards
- each standard in the syllabus has set of performance indicators that give the student what they should know and be able to do. These are all expressed in the scripted lessons that you will use to teach mathematics on daily basis
- the assessment task is also given for each topic so that you are progressively assessing student's competencies and achievements of standards. They are also shown in the lessons that you will use in this teacher guide.
- the syllabus also has the benchmark to work towards so that by the end of Elementary 2 students should be competent and qualified in mathematical knowledge, skills and attitudes and are able to move to grade 3 at primary level of schooling. These can be tested at the end of grade 2. When you assess assessment tasks the students should be able to achieve the bench making standards by the end of E2

Conditions of learning – a model of natural learning – refer to Teacher Guide (2004)

Conditions	What does this mean	In mathematics
Immersion	Learners need to be surrounded with many learning materials and situations	Surround students with Mathematics resources and materials – stones, sticks, shells, shapes, linking cubes, etc. these are all included in the resources section for each term.
Demonstration	Learners need to receive many demonstrations of how to do things	Teachers demonstrate how to count or group sets of objects etc. and show students how to do the activity. At the introduction and during supervision of the lesson activity.
Expectation	Learners receive messages from other people who help them to realise that they have the capacity to master certain skills	Students must look forward to what they will learn at the end of the lesson. Be able to take this skill and apply it or use it at home or in the community. Parents must hear their children counting numbers not only in school but also at home.
Responsibility	Learners make their own decisions about when, how and what to learn when given any learning task.	During scripted lesson activities everyone should be encouraged to decide and take responsibility for doing the activities during the lesson.
Use	Learners need time and opportunities to practise the skills and knowledge which they have learnt.	Students are given during the lesson to practice and display their skills. Take home work should be given in E2 classes.
Approximation	Learners must be allowed to make guesses about how to say things. It is quite acceptable for learners to make mistakes in order for learning to take place	During teacher and student interaction the learner must be allowed to make mistakes to help him /her learn from the mistakes. Questions should be asked to help student learning.
Response	Learners learn from feedback that reinforces correct solutions or corrects mistakes. This feedback must be relevant and non-threatening.	At the end of the lesson time given time for feedbacks and assessment to see how well students are doing and learning. They must be appraised during and at the end of lessons.

Approaches of teaching and learning

Student - centred-approaches

Here are some ideas about student learning approaches that you should ensure they are implemented during teaching and learning with the children at Elementary Prep level.

What students should do during lessons?	What teacher should do for teaching?
• Students should do more talking than the teacher • Plenty of time given to their activities • Take part in many different activities that relate to real life experiences to develop critical thinking and understanding e.g. plenty of play activities • Discover new information on their own and with guidance from the teacher • Use an inquiry learning approach to explore a topic • Frequently work in small groups to cooperate with peers • Have a chance to evaluate their efforts • Use real objects to support learning • Choose activities and topics for their projects • Have a chance to correct their efforts • Choose who they will share the learning situation with	• Play the role of a facilitator • Provides a rich learning environment for students' leaning • Develop a supportive atmosphere in the classroom • Implement the daily lesson plans • Make resources available – prepare tasks for learning • Observe children and supervise their progress • Ask questions to assist children's learning • Appraise students efforts and shows how to improve from their mistakes • Is aware of what students do , how they feel and respond with understanding • Is patient and gentle in his or her approach

Multigrade teaching

Usually teachers in a school would have one grade to teach for the whole year. In many communities the enrolments are low, so schools may have multigrade classes. This means that two or three different grades are grouped together and are supervised by one teacher. The classes are made up of students of different ages, abilities, interests and needs grouped together for learning.

A successful multigrade classroom provides opportunities for students to work in small groups, pairs, individually and as a whole class. The group work must have a purpose. One way of grouping is in ability groups based on the real needs identified. If students are experiencing difficulties, small groups will meet their needs. The tasks provided for each group needs to be challenging. The students must be clear about what they are expected to do and have them practise the skills while the teacher assists particular groups.

- **Learning and thinking strategies in Mathematics**

Strategy	Learning situation in mathematics class
Mental Mathematics	Develop mental mathematics thinking and process skills in children
Number Rhymes and songs	Reinforce simple number bonds, number patterns, sequencing, conversation, ordering of number
Games Memory games Number bonds game Shape games	Collecting of variety of games and rhymes develop children's enjoyment of mathematics Support mental mathematics Develop mental images of number shapes etc..
Interactive story e.g. fraction story to reinforce half	Develop mental images of numbers, shapes etc. Using puppets and toys to gain attention Reinforce concepts
Mathematical vocabulary; Oral work based on practical activities, reading aloud and silently, writing and recording in variety of ways, mathematics dictionary	Develops student's thinking in understanding spoken and written instructions, familiar with mathematical vocabulary, understand meaning of words in mathematics Teacher and children can make mathematics dictionary and use it in class
Response strategy – thumbs up – down- across	Method that allows students to self-assess their understanding – good to use in big classes to assess students quickly
Role Play (action/kinaesthetic)	Role play about e.g. sharing out objects as in addition, division
Visual clues	Calculation on the board in reference to objects used in activity e.g. showing children how they obtained the solutions to their problems
Oral clues – Questioning about; • Remembering facts • Using facts • Predicting • Applying reasoning • Interpreting results • Designing and comparing procedures	The use of questioning helps students to understand mathematical ideas and use the terms correctly- teacher may ask questions in different ways to help students pick up meaning of ideas and concepts. Teacher asking open and closed ended questions using appropriate maths vocabulary develops higher order thinking skills and helps them to recall fact and helps them to give good answers and respond in appropriate ways
Class involvement	Writing, answering questions, watching role play and actively participating in play activities
Investigations and problem solving	These can be used in different ways to develop higher order skills such as reflection, analysis, being able to discuss and express themselves, help creative thinking skills, problem solving and developing and using language to think

Time Table.

Use the sample time table below to plan your teaching and learning plan for each week. Mathematics should be taught for 40 minutes per day

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8.00 - 8.30am	**Assembly and devotions**				
8.30-9.30	Language	Language	Language	Language	Language
9.30-10.30	English	English	English	English	English
10.30 -11.00	**Recess**				
11.00 – 11.40	Maths lesson 1	Maths lesson 1	Maths lesson 1	Maths lesson 1	Maths lesson 1
11.40 -12.00	CRE	CRE	CRE	CRE	CRE
12.00N -1.00	**Lunch**				
1.00-2.30pm	C & C	C & C	C & C	C & C	C & C

Time allocations per week	
Block Time (assembly and devotion)	150 minutes
Recess and lunch breaks	360 minutes
Home language	300 minutes
English	300 minutes
Mathematics	240 minutes
Culture and Community	360 minutes
Christian Religious Education	60 minutes
Total time per week	**1770 minutes**

PLANNING AND PROGRAMMING

Yearly Plan for Elementary Prep

This yearly plan is organised into terms for you and have been used to plan the objectives for each day's scripted lessons. Every elementary school will be teaching the same topics at the same time.
Week 1 is either orientation (Term 1) or revision of previous terms' learning.
Week 10 is to assess and report to parents on students' progress.

Weeks	Term 1	Term 2	Term 3	Term 4
1	**Orientation**	**Revision**	**Revision**	**Revision**
2	Numbers up to 120 (Counting) **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120	Numbers up to 120 (Counting) **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120	Numbers up to 120 (Counting) **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120	Numbers up to 120 (Counting) **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120
3	**Numbers up to 120 (Comparing & Ordering)** **P.1.2** Depending on the context, distinguish the number of objects and their position in order of objects with numbers, and explain the condition carefully to the others	**Numbers up to 120 (Comparing & Ordering)** **P.1.3** Compare larger or smaller numbers on the number sequence and number line, and arrange in order	**Addition and subration of 1 and 2 digit numbers. (Addition and Subtraction)** **P.1.5** Understand the meaning of addition and calculate 1 digit numbers and 2 simple digit numbers	**Numbers up to 120 (Comparing & Ordering)** **P.1.3** Compare larger or smaller numbers on the number sequence and number line, and arrange in order
4	**Addition and subration of 1 and 2 digit numbers. (Addition and Subtraction)** **P.1.5** Understand the meaning of addition and calculate 1 digit numbers and 2 simple digit numbers	**Finding patterns (Extending Patterns)** **P.4.1** Find patterns and recognise their structure in addition and subtraction.	**Arbitrary Units for Comparison (Weight)**	**Addition and subration of 1 and 2 digit numbers. (Addition and Subtraction)** **P.1.5** Understand the meaning of addition and calculate 1 digit numbers and 2 simple digit numbers **P.1.6** Understand the meaning of Subtraction and calculate 1 digit numbers and 2 simple digit numbers

5	**Addition and subration of 1 and 2 digit numbers. (Addition and Subtraction)** **P.1.5** Understand the meaning of addition and calculate 1 digit numbers and 2 simple digit numbers	**Finding patterns (Extending Patterns)** **P.4.1** Find patterns and recognise their structure in addition and subtraction.	**Arbitrary Units for Comparison (Capacity)**	**Arbitrary Units for Comparison (Length)** **P.2.1** Understand and compare quantities and produce arbitrary units of measurement
6	Numbers up to 120 (Counting) **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120	**Making Shapes (Plane Shapes -2-D Shapes)** **P.3.1** Understand the characteristics of geometrical figures through observation and composing using familiar shapes of objects	**Arbitrary Units for Comparison (Capacity)**	**Addition and subration of 1 and 2 digit numbers. (Addition and Subtraction)** **P.1.5** Understand the meaning of addition and calculate 1 digit numbers and 2 simple digit numbers **P.1.6** Understand the meaning of Subtraction and calculate 1 digit numbers and 2 simple digit numbers
7	**Telling time (Time)** **P.2.2** Read o'clock time in relation to long and short hand on the clock face	**Making Shapes (Solids -3D shapes)** **P.3.1 U**nderstand the characteristics of geometrical figures through observation and composing using familiar shapes of objects	**Telling time (Time)** **P.2.2** Read o'clock time in relation to long and short hand on the clock face	**Making Shapes (Angles and Directions)** **P.3.1** Understand the characteristics of geometrical figures through observation and composing using familiar shapes of objects
8	**Base 10 place value (Money)** **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120	**Arbitrary Units for Comparison (Weight)**	Numbers up to 120 **(Money)** **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120	**Representing quantities (Representing and interpreting data)** **P.4.2** Explore and represent number of objects in form of picture and figures and interpret their patterns

9	**Numbers up to 120 (Comparing & Ordering)** **P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120	**Arbitrary Units for Comparison (Length)** **P.2.1** Understand and compare quantities and produce arbitrary units of measurement	**Finding patterns (Extending Patterns)** **P.4.1** Find patterns and recognise their structure in addition and subtraction.	**Representing quantities (Representing and interpreting data)** **P.4.2** Explore and represent number of objects in form of picture and figures and interpret their patterns
10	**Reporting**			

PLANNING AND PROGRAMMING

Weekly objectives

Weekly and daily objectives have been written for you for every term. Use this to make sure your teaching is keeping pace with other schools.

Elementary Prep TERM 1

Week	Standard	Day	Objective
1	Orientation, registration and revision		Get to know their school environment and settle into classroom. Assess what the children already know.
2	Count the number of object in a set 1-20 or more	Monday	Count objects 1 to 5 and count backwards 5 to 1 in a language that the child knows best
		Tuesday	Say numbers 1-5 in child's language and match them with English words for 1-5
		Wednesday	Translate 1 up to 5 into English & count objects 1 up to 5 and backwards 5 to 1 in both child's language and English
		Thursday	Count 1 to 5 in different sets of objects in both child's language and English
		Friday	Count 1 to 5 and count objects in both the child's language and English forwards and backwards
3	Compare and order sets of objects and numbers I – 20 or more	Monday	Sort and compare objects in sets that are same or different
		Tuesday	Order objects from 1-10 and 10 – 1 and compare the siz
		Wednesday	Compare sets of objects using more than or less than
		Thursday	Order numbers 1-10 and 10 - 1
		Friday	Order and compare numbers using more than or less than e.g. Is 1 more or less than 3 and vice versa
4	Combine and separate sets of objects, 1-20 or more	Monday	Make and combine sets of objects to give a total of 5 objects in a set
		Tuesday	Make and combine sets of objects to give a total of 10 in a set
		Wednesday	Separate a set of 5 objects into two groups of any number
		Thursday	Separate a set of 10 objects into 2 groups of any number
		Friday	Use number cards to combine and separate numbers 2-10

5	Combine and separate sets of objects, 1-20 or more or more	Monday	Make 2 or 3 sets of objects that combine to make numbers between 2-10
		Tuesday	Make 3 or 4 sets of objects that combine to make numbers between 2-10
		Wednesday	Collect 20 objects and break into different sets which total 10
		Thursday	Match number cards with sets of objects and combine number cards and sets to come up with totals
		Friday	Use number cards to do combine and separate numbers from 1-10
6	Count and estimate the number of objects in a set, 1-20 or more	Monday	Count objects 1 to 10 and count backwards 10 to 1 in a language that the child knows best.
		Tuesday	Say numbers 1-10 in child's language and match them with English words for 1-10
		Wednesday	Translate 1 up to 10 into English & count objects 1 up to 10 and backwards 10 to 1 in both child's language and English
		Thursday	Count 1 to 10 in different sets of objects in both child's language and English
		Friday	Count objects and numbers 1 to 10 in both the child's language and English
7	Order daily and weekly events Tell time using morning, lunch, afternoon, before, after Read time in one hour intervals	Monday	Tell what things are used to mark time e.g. sun
		Tuesday	Tell what they do in the morning, midday, afternoon and night
		Wednesday	Draw pictures of activities done in morning, midday, afternoon and night.
		Thursday	Draw pictures of activities done in morning, midday, afternoon and night.
		Friday	Use informal units to describe and tell time
8	Recognise notes up to K20 and coins up to K1	Monday	Sort coins into different group values (5ts, 10ts, 50ts and K1) & sort notes into different group values (K2, K5, K10 & K20)
		Tuesday	Group 5ts to make K1 and group K2s to make K20
		Wednesday	Group 10ts to make K1 and gr oup K5s to make K20
		Thursday	Group 20ts to make K1 and group K10s to make K20
		Friday	Group 50ts to make K1 and group all different notes to make K20

9	Compare and order sets of objects and numbers 1 – 20	Monday	Count reliably in color, shapes, sizes of objects 1 to 15
		Tuesday	Compare and order objects in ones, 3s and 5s
		Wednesday	Compare and order odd and even numbers within set of 15
		Thursday	Compare and order in line, color, shapes and number what is first, second ,third and last
		Friday	Order and compare into differences and similarities
10	Assessment and reporting week	Report to parents on the children's assessment for this term	

Elementary Prep Term 2

Week	Standard	Day	Objective
1	Revise Term 1 content		Revise Term 1 number content
2	Count the number of object in a set, 1-20 or more or more	Monday	Count objects 1 to 15 and count backwards 15 to 1 in a language that the child knows best.
		Tuesday	Say numbers 1-15 in child's language and match them with English words for 1-10.
		Wednesday	Translate 1 up to 15 into English & count objects 1 up to 15 and backwards 15 to 1 in both child's language and English
		Thursday	Count 1 to 15 in different sets of objects in both child's language and English
		Friday	Count 1 to 15 number and objects forwards and backwards in both the child's language and English.
3	Compare and order sets of objects and numbers 1-20 or more or more Use vocabulary: first, second, third, last	Monday	Put stones into groups of 2 and 3, 4 and 5, 6 and 7, … compare the size, which is more, which is less
		Tuesday	Comparing two groups: which is more/less
		Wednesday	Comparing 3 groups: which is the most/less
		Thursday	Order from 1 – 20
		Friday	Order from 20 – 1

4	Recognize and complete simple patterns in colour, shapes and sizes	Monday	Make and follow simple sound patterns e.g. 1 clap, 2 claps
		Tuesday	Identify repeating patterns of colour and designs in things such as bilums, local mats, tapa cloths and clay pots found in their communities
		Wednesday	Repeat patterns using objects such as stones, sticks, shells, seeds, beads and leaves
		Thursday	Make repeating patterns of shapes and sizes on things such as bilums, local mats, tapa cloths and clay pots found in their communities
		Friday	Maker repeating patterns using one or two objects and colors following a pattern
5	Know that the same number of objects can be arranged in different ways	Monday	Make different patterns with any objects
		Tuesday	Use the same objects to make different patterns
		Wednesday	Orally complete given patterns using objects
		Thursday	Arrange same numbers of objects in different ways to form patterns
		Friday	Recognize and complete simple number patterns that increase by 1 & 2 e.g. odd and even numbers
6	Identify and name circles, triangle, squares in their environment	Monday	Pick out a circle from all the other shapes in a box and identify objects that are similar to circles.
		Tuesdayw	Pick out a square from all the other shapes in a box and identify objects that are similar to squares.
		Wednesday	Pick out a triangle from all the other shapes in a box and identify objects that are similar to triangles around classroom & outside classroom.
		Thursday	Group similar shapes together and name them.
		Friday	Draw, cut out and match triangles, squares and circles.
7	Select and sort solid shapes found in their environment.	Monday	Pick out a cylinder-shape item (can) from all the other solid items in a box and identify items that are similar to a cylinder.
		Tuesday	Pick out a cone-shaped item (witches cope shaped-hats) from all the other solid items in a box and identify items that are similar to a cone.
		Wednesday	Pick out a cube-shaped item from all the other items in a box and identify solid objects that are similar to a cube.

		Thursday	Pick out a sphere-shaped item (ball) from all the other shapes in a box and identify solid items that are similar to a sphere
		Friday	Group similar solid shaped items together and name them.
8	Measure light and heavy objects using non-standard units	Monday	Compare weights of objects using the palms of their hands, using the words lighter and heavier
		Tuesday	Compare the weight of 3 objects and order from lightest to heaviest
		Wednesday	Compare the weights of five objects and order from lightest to heaviest
		Thursday	Compare and order the weight of common foods in their environment e.g. kaukau, coconuts, bananas
		Friday	Compare the sizes of large objects in their communities e.g. bicycles, cars, truck, and order them from lightest to heaviest
9	Measure height and length in non-standard ways	Monday	Measure length of classroom furniture using the number of hand spans.
		Tuesday	Measure height of children using the number of hand spans and sticks and rope/string.
		Wednesday	Measure length of classroom using hand spans, arms lengths and steps, sticks and rope/string.
		Thursday	Measure length and height of different things using hand spans, arm lengths, steps sticks and ropes/string.
		Friday	Measure different things around school and record using appropriate informal measurement.
10	Assessment and reporting week		Report to parents on the children's assessment for this term

PLANNING AND PROGRAMMING

Elementary Prep Term 3

Week	Standard	Day	Objective
1	Revise Term 2 content using your own daily lesson plans for this week	**Monday to Friday**	Revise Term 2 number content
2	Count and estimate the number of objects in a set, 1-20 or more or more	Monday	Count objects 1 to 15 and count backwards 15 to 1 in a language that the child knows best.
		Tuesday	Say numbers 1-15 in child's language and match them with English words for 1-10.
		Wednesday	Translate 1 up to 15 into English & count objects 1 up to 15 and backwards 15 to 1 in both child's language and English
		Thursday	Count 1 to 15 in different sets of objects in both child's language and English
		Friday	Count 1 to 15 in both the child's language and English and count objects 1 to 15 and backwards 15 to 1 in both languages.
3	Solve simple oral and pictorial problems 1-2 0 or more	Monday	Work out simple oral addition problems from maths stories using 1-10
		Tuesday	Solve simple picture addition problems from stories using 1-10
		Wednesday	Work out simple oral subtraction problems from stories using 1-10
		Thursday	Solve simple picture subtraction problems from stories using 1-10
		Friday	Make up simple addition and subtraction problems for peers using 1-10
4	Estimate and measure light and heavy objects using beam balances	Monday	Estimate the weight of an object using non-standard units
		Tuesday	Find objects that weigh the same as e.g 5 stones
		Wednesday	Find pairs of objects that weigh the same, using a beam balance.
		Thursday	Estimate and weigh fruits and vegetables using non-standard units
		Friday	Estimate and order objects according to their weight
5	Estimate and measure the capacity of containers using non-standard units	Monday	Say which containers are full and which are empty
		Tuesday	measure the capacity of different containers and put them in order from smallest to biggest
		Wednesday	measure the capacity of different containers and put them in order from biggest to smallest

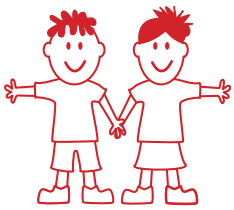
		Thursday	estimate the capacity of a container and measure the amount of water in can hold
		Friday	Select the biggest container from a group
6	Compare and measure the capacity of containers using standard units – litres (L)	Monday	Use 1L and ½ L measuring containers
		Tuesday	Find containers in the community that hold about 1L
		Wednesday	Find containers in the community that hold about 1/2L
		Thursday	Order containers from biggest to smallest and check by measuring in L and ½ L
		Friday	Know that when ½ L of water is put into different containers it will look different
7	Order daily and weekly events Tell time using morning, lunch, afternoon, before, after Read time in one hour intervals	Monday	Estimate time for breakfast recess and lunch hours
		Tuesday	Read the clock face in o'clock
		Wednesday	Tell time for 6 o'clock, 10 o'clock, 12 o'clock, 3 o'clock etc
		Thursday	Read and draw clock face for 6 o'clock and3 o'clock etc
		Friday	Read and order morning time (6 - 12)and afternoon time (12 – 6)
8	Do play activities to solve simple money problems	Monday	Count out 10t coins to buy an items that is worth K2.
		Tuesday	Count out 20t coins to buy an item that is worth K5.
		Wednesday	Count out 50t coins to buy an item that is worth K5 and K10.
		Thursday	Count out K1 coins to buy an item that is worth K5 and K10 and K20.
		Friday	Count out coins (5t, 10t, 20t, 50t, K1) and notes (K2, K5, K10, K20) to buy items that is worth K20 or less.
9	Combine and separate sets of objects, 1-20 or more or more Solve simple oral and pictorial problems 1-20 or more or more	Monday	Make and draw pictures of sets of objects and match them with number symbols 1-20 or more
		Tuesday	Write and match pictures of sets of sets of objects with addition and subtraction symbols
		Wednesday	Make and write simple number sentences following a pattern increasing by 1
		Thursday	Make and write simple number sentences following a simple pattern increasing by 2
		Friday	Make and write simple number sentences following a simple pattern increasing by 5
10	Assessment and reporting week		Report to parents on the children's assessment for this term

Elementary Prep Term 4

Week	Standard	Day	Objective
1	Revise Term 3 content		Revise Term 3 number content
2	Count the number of object in a set 1-20	Monday	Count objects 1 to 20 and count backwards 20 to 1 in a language that the child knows best.
		Tuesday	Say numbers 1-20 in child's language and match them with English words for 1-20.
		Wednesday	Translate 1 up to 20 into English & count objects 1 up to 20 and backwards 20 to 1 in both child's language and English
		Thursday	Count 1 to 20 in different sets of objects in both child's language and English
		Friday	• Count 1 to 20 in both the child's language and English. • Count objects 1 to 20 and backwards 20 to 1 in both languages.
3	Compare and order numbers 0-20	Monday	Count reliably in color, shapes, sizes of objects 1 to 20
		Tuesday	Compare and order in line, color, shapes and number what is first, second ,third and last
		Wednesday	Order number of objects on number lines 1-20 or more
		Thursday	Compare small to larger numbers – 1 digit to 2 digit or addition of 1 number on top to larger number – increase by a number or 3 or 5 numbers
		Friday	Compare number into smaller to bigger on number line
4	Solve simple oral and pictorial problems 1-20 or more or more	Monday	Solve simple picture addition problems using 1-20 or more
		Tuesday	Solve simple picture subtraction problems using 1-20 or more
		Wednesday	Solve simple addition and subtraction problems from stories using 1-20 or more
		Thursday	Make simple addition and subtraction stories for other children using 1-20 or more
		Friday	Make simple addition and subtraction problems for other children using 1-20 or more

5	Compare height and length using 'longer than', 'shorter than' and 'taller than'.	Monday	Group children into different heights (shortest to tallest) and measure their heights using sticks, strings/ rope and compare their heights
		Tuesday	Group classroom furniture into different lengths and measure length using hand spans, arm lengths, steps sticks and ropes and compare their lengths.
		Wednesday	Group classroom furniture into different heights and measure heights using hand spans, arm lengths, steps sticks and ropes and compare their lengths.
		Thursday	Measure and compare length of different buildings around school using hand spans, arms lengths and steps, sticks and rope/string.
		Friday	Pick something to measure and select the most appropriate form of informal measure to measure them.
6	Solve simple oral and pictorial problems 1-20 or more	Monday	Solve simple picture addition problems using 1-20 or more
		Tuesday	Solve simple picture subtraction problems using 1-20 or more
		Wednesday	Solve simple addition and subtraction problems from stories using 1-20 or more
		Thursday	Make simple addition and subtraction stories for other children using 1-20 or more
		Friday	Make simple addition and subtraction problems for other children using 1-20 or more
7	Give and follow simple moving and turning directions using forwards, backwards, sideways, up, down, left, right	Monday	Follow simple instruction to move forward and backwards up to 20 steps
		Tuesday	Follow simple instructions to move forwards, sideways and back up to 20 steps
		Wednesday	Follow simple instructions to move to the left up to 20 steps
		Thursday	Follow simple instructions to move to the right up to 20 steps
		Friday	Can follow 2 step instructions eg move forward 6 and right 3
8	Collect objects and sort them into groups	Monday	Sort objects into two groups using their own criteria
		Tuesday	Collect objects from the local environment and sort them into two groups using their own criteria

		Wednesday	Guess what criteria has been used by another child to sort their objects
		Thursday	Collect and sort objects found in the environment into three groups using their own criteria and draw their groups
		Friday	Sort objects using criteria given by the teacher and draw their groups
9	Collect objects and sort them into groups	Monday	Sort and group 2-D & 3-D shapes and draw the groups
		Tuesday	Sort and group heavy and light; long and short objects and draw the groups
		Wednesday	Sort numbers according to criteria given by the teacher e.g. even and odd, more or less than 10
		Thursday	Sort daily events according to criteria given by the teacher e.g. things done in the morning; things that happen at night, time
		Friday	Tell the teacher their favorite topics in math and explain why (this will help the teacher in her/his assessment)
10	Assessment and reporting week		Report to parents on the children's assessment for this term



DAILY LESSON PLANS

TERM 1 WEEK 2 MONDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

Note: The above information is for the whole week 2 Term1

1 OBJECTIVE

Count objects 0 to 5 and count backwards 5 to 0 in the language that the children know best.

2 STARTER

Sing a number song in the language the children know best.

3 INTRODUCTION

Show the children how to count from 0 to 5 using their fingers and other objects.

Show the children how to count backwards from 5 to 0.

4 TEACHER AND STUDENT ACTIVITY

Show the children how to count from 0 to 5 on their fingers.

Together with the children, count from 0 to 5 in the language they know best.

When the children are confident in counting from 0 to 5, show them how to count backwards from 5 to 0 using their fingers.

Put the children in pairs and show them how to use the objects to count from 0 to 5.

Get the children to practise or to play at counting objects.

5 CONCLUSION AND ASSESSMENT

Ask the children to show you how they can count from 0 to 5 and from 5 to 0 using their fingers.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Sing your number song to finish.

TERM 1 WEEK 2 TUESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Say numbers 0 to 5 in the children's language and match them with the English words for 0 [zero] to 5.

2 STARTER

Get the children to make 5 jumps, claps, steps or knocks and to count each one.

3 INTRODUCTION

Show the children again how to count from 0 to 5 on their fingers.

Show the children again how to count backwards from 5 to 0 on their fingers.

4 TEACHER AND STUDENT ACTIVITY

Introduce the English words for numbers 0 to 5.

Show the children how to use their fingers to help to count from 0 to 5 in Tok Ples and then count 0 to 5 in English. Now count together with the children.

When the children are confident in counting from 0 to 5, show them how to count backwards from 5 to 0 in English.

Put the children in pairs and ask them to count objects from 0 to 5 in both Tok Ples and English.

Teach the children the song '1 man went to buy, went to buy a football'. Sing the song together.

5 CONCLUSION AND ASSESSMENT

Ask the children to show you how they can count from 0 to 5 and from 5 to 0 using their fingers, in English and Tok Ples.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Sing the number song to finish.

TERM 1 WEEK 2 WEDNESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Translate 0 to 5 into English and count objects 0 to 5 and backwards 5 to 0 in both the children's language and English.

2 STARTER

Count from 0 to 5 in the children's home language. Revise the numbers 0 to 5 in English.

Sing a number song, e.g. '5 fat piggies sitting on a wall'.

3 INTRODUCTION

Show the children again how to count from 0 to 5 using their fingers and other objects.

Show the children again how to count backwards from 5 to 0 using their fingers and other objects.

4 TEACHER AND STUDENT ACTIVITY

Say the English words for numbers 0 to 5. Count together with the children.

Show the children again how to use their fingers to count from 0 to 5 in Tok Ples and then in English. Count together with the children.

When the children are confident in counting from 0 to 5, show them how to count backwards from 5 to 0 in English.

Teach the children a new number song to count from 0 to 5 and from 5 to 0, e.g '5 little birds sitting in a tree'.

Put the children in pairs, each pair near a pile of objects, and show them how to count groups of objects from 0 to 5. Get the children to practise counting out different groups of objects.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show you a group of 3 objects. Does the rest of the class agree that they are correct? Ask another pair to show you a group of 5 objects. Does the class agree?

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Sing '5 little birds sitting in a tree'.

TERM 1 WEEK 2 THURSDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count different sets of 0 to 5 objects in both the children's language and English.

2 STARTER

Give all children a chance to count any objects of their choice from 0 to 5 in their home language and to try counting in English from 0 to 5.

3 INTRODUCTION

Show the children again how to count from 0 to 5 using their fingers and other objects.

Show the children again how to count backwards from 5 to 0 using their fingers and other objects.

4 TEACHER AND STUDENT ACTIVITY

Sing '5 little birds' together with the children.

Put the children in pairs. Give each pair a small pile of objects and help them to count from 0 to 5 and backwards in Tok Ples, then in English. Get the children to practise counting.

Show the children how to string together groups of different coloured shapes. They can be circles, squares, triangles and diamonds. They can be 2D or 3D shapes.

Give the pairs of children some coloured shapes. Ask some pairs to string together groups of 2 shapes, some groups of 3 shapes, some groups of 4 shapes and some groups of 5 shapes.

5 CONCLUSION AND ASSESSMENT

Ask 5 pairs of children to come to the front with their strings of objects. Can they put themselves in order from the smallest group of objects to the biggest group of objects? Does the class agree?

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Sing '5 fat piggies sitting on a wall'.

TERM 1 WEEK 2 FRIDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count objects 0 to 5 in both the children's language and English, forwards and backwards.

2 STARTER

Show groups of objects from 0 to 5 on flashcards. Get the children to count them quickly and say the number of objects either in Tok Ples or English.

3 INTRODUCTION

Say a number from 0 to 5 and ask the children to jump or clap their hands the same number of times, counting in English as they jump or clap.

4 TEACHER AND STUDENT ACTIVITY

Show the children again how to count from 0 to 5 using fingers.

Put the children into pairs to count different objects from 0 to 5. Tell the children to count the objects first in their own language then in English.

Give the children objects to string together and tell them to string 5 shapes together.

Display children's work in the classroom.

5 CONCLUSION AND ASSESSMENT

Ask a child to pick out any 5 objects from a box and show them to the class. Does the class agree that they have counted them correctly? Now ask other children to do the same.

Make a note of those children who are not able to do this and those finding it too easy.

Record the week's work in your class assessment folders.

Sing a number song to finish.

TERM 1 WEEK 3 MONDAY **COMPARING AND ORDERING**

1 OBJECTIVE

Sort and compare objects in sets that are the same or different.

2 STARTER

Count from 0 to 5 and backwards from 5 to 0 in Tok Ples and in English.

3 INTRODUCTION

Show 2 pieces of string — a longer string and a shorter one. Ask the children if they are the same or different. Ask why they think this.

LESSON TOPIC: Comparing and Ordering

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

Note: The above information is for the whole week 3 Term 2

4 TEACHER AND STUDENT ACTIVITY

Show the children a group of shells and a group of stones. Ask if the groups are the same or different. Ask why they think this.

Show the children 2 groups of stones — one group of 5 and one group of 10. Ask if the groups are the same or different. Ask why they think this.

Show them 2 groups of shells with 5 in each group. Ask if the groups are the same or different. Ask why they think this.

Put the children in pairs and give each pair a pile of different objects, e.g. stones, shells, sticks, seeds, pieces of string. Ask the children to make different groups and to tell each other if they are the same or different.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show the class 2 of their groups and to say whether they are the same or different and why they think this. Does the rest of the class agree? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

TERM 1 WEEK 3 TUESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Number and Operation

CONTENT STANDARD: P.1.2

1 OBJECTIVE

Group objects from 0 to 10 and 10 to 0 and compare the size.

2 STARTER

Teach the children to count from 5 to 10 and backwards from 10 to 5. Count together in Tok Ples and English.

Ask children to stand up. Together, say this chant with actions: '1 2 3 catch a fly (action of catching the fly), 3 4 5 let it go (open palms to let the fly go), 6 7 8 clean my hands (action), 9 10 sit down (action)'.

3 INTRODUCTION

Show the children 2 groups of objects. Together, count how many objects are in each group. Tell the children that the group with the bigger number of objects has more than the other group. The group with the smaller number of objects has less than the other group. Ask the children to say the words 'more than' and 'less than'.

4 TEACHER AND STUDENT ACTIVITY

Show 5 fingers from one hand and 2 fingers from the other hand. Ask which hand shows more fingers and which shows less. Repeat with different numbers of fingers.

Put the children into pairs and give each pair 10 sticks. Tell them to make 2 groups of sticks and to decide which group has more sticks and which has less. Repeat with different groupings, each time with the children saying which group has more and which has less.

Move around the class listening to the children. If they are not correct, ask them to count the sticks in each group and to show you the numbers on their fingers. Ask again which has more and which has less.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show the class 2 of their groups and to say which has more and which has less. Does the rest of the class agree? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

TERM 1 WEEK 3 WEDNESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Number and Operation

CONTENT STANDARD: P.1.2

1 OBJECTIVE

Compare sets of objects using 'more than' or 'less than'.

2 STARTER

Play 'Get into'. Take children outside. Call a number and tell the children to get into groups of that number. Repeat with different numbers up to 10.

3 INTRODUCTION

Show the children 2 groups of objects. Together, count how many objects are in each group. Tell the children that the group with the bigger number of objects has more than the other group. Tell them that the group with the smaller number of objects has less than the other group. Ask the children to say the words 'more than' and 'less than'.

4 TEACHER AND STUDENT ACTIVITY

Choose 10 children and put them into two groups. With the class, count how many children are in each group. Ask them which group has more and which has less. Repeat with different children and different group sizes.

Put the children into pairs and give each pair a pile of objects. Tell one child in each pair to sort the objects into 2 groups of different sizes. Tell the second child to say which group has more than the other and which group has less than the other. Repeat.

Walk around the class to listen to what the children are saying. If they are not correct, help them to count each group and to use the words 'more than' and 'less than' to compare the groups.

Take the children out for a walk to compare things outside. Look at buildings, trees, animals and compare them, e.g. there are more trees than buildings, etc.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show the class 2 of their groups and to say which has more and which has less. Does the rest of the class agree? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

TERM 1 WEEK 3 THURSDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Number and Operation

CONTENT STANDARD: P.1.2

1 OBJECTIVE

Order numbers 0 to 10 and 10 to 0.

2 STARTER

Play a game by telling the children that you will say a number and they have to say the number that is one more, e.g. 'I say 2, you say 3'. Repeat using numbers from 0 to 9.

3 INTRODUCTION

Ask 10 children to stand in line at the front of the class. Count them from 1 to 10. As you count backwards from 10 to 1, the child with that number sits down. Ask the children to stand up and repeat the activity, slowly then faster.

4 TEACHER AND STUDENT ACTIVITY

Ask 10 children to stand at the front of the class. Give them each a number card from 1 to 10 and mix them up. Ask the class to help you to put them in the right order from 1 to 10. Count from 1 to 10 and backwards from 10 to 1.

Ask the class to shut their eyes. Move two children to different places. Ask the class to open their eyes and to tell you which children have moved. Put them back in the correct place and repeat.

Put the children into pairs and give them number cards from 1 to 10. Tell them to mix the cards up and then put them into the correct order.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 10 and from 10 to 0. Ask 10 children to stand at the front of the class. Give them each a number card from 1 to 10. Ask the class to help you put them in the right order from 1 to 10.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Together, say the chant '1 2 3 catch a fly'.

TERM 1 WEEK 3 FRIDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Number and Operation

CONTENT STANDARD: P.1.2

1 OBJECTIVE

Order and compare numbers using 'more than' or 'less than', e.g. 'Is 1 more than or less than 3?'

2 STARTER

Play the game 'I say, you say'. Start with the rule that the children have to say the number that is one more than the number you say, e.g. 'I say 4, you say 5'. Use all of the numbers from 0 to 9.

Change the rule so they have to say the number that is one less, e.g. 'I say 10, you say 9'. Use all of the numbers from 10 to 1.

3 INTRODUCTION

Show number flashcards from 0 to 10. Ask the children to say the numbers forwards and backwards, as a class or individually. Now show flashcards in any order. Ask the children to clap the same number of times as the number on each flashcard.

4 TEACHER AND STUDENT ACTIVITY

Show a flashcard between 1 and 9. Ask the class to tell you any number that is more than this number and any number that is less than this number. Repeat using different flashcards.

Put the children into pairs and give each pair a pile of objects. Call out 2 numbers and ask each pair to make 2 piles of objects with these numbers. Ask them to point at the pile which has more than the other pile and at the pile which has less than the other pile. Repeat with different numbers.

Give the children time to practise making their own piles. Help those who are having difficulty.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 10 and from 10 to 0. Ask 10 children to stand at the front of the class. Give them each a number card from 0 to 10. Ask the class to help you to put them in the right order from 0 to 10.

Make a note of those children who are not able to do this and those finding it too easy.

Record the week's work in your class assessment folders.

Together, say the chant '1 2 3 catch a fly'.

TERM 1 WEEK 4 MONDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

Note: The above information is for the whole week 4 Term1

1 OBJECTIVE

Make and combine sets of objects to give a total of 5 objects in a set.

2 STARTER

Count from 0 to 10 and backwards from 10 to 0 in the language the children know best. Count slowly, then count quickly.

3 INTRODUCTION

Tell the children they are going to learn to add. Show them the flashcard 4 and put 4 stones on it. Show them the flashcard 1 and put 1 stone on it. Ask how many stones there are altogether. Show them how to count the stones. Say, '4 stones add 1 stone equals 5 stones'. Repeat with 3 stones and 2 stones.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give each pair 5 stones. Ask them to make 2 groups of stones and to say an addition, e.g. '1 stone add 4 stones equals 5 stones'.

Now ask one child in each pair to make the two groups and the other child to say the addition. Tell them to take turns to make different groups.

Now show them how to make 3 groups of stones and to combine them to make a group of 5, e.g. 1 stone add 1 stone add 3 stones equals 5 stones. Ask children to practise making 3 groups.

Move around the class and observe the children combining their groups. Help those that need it. If children are finding it too easy, give them two more stones to put into their groups.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one of their additions. Do the other children agree with their answer? Ask other pairs to show their additions.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

TERM 1 WEEK 4 TUESDAY **ADDITION AND SUBTRACTION**

1 OBJECTIVE

Make and combine sets of objects to give a total of 10 in a set.

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

2 STARTER

Sing '10 ripe pawpaws'.

3 INTRODUCTION

Tell the children that 'sets' is another word for 'groups'. Remind the children about yesterday's lesson on how they combined objects to make a set of 5.

Tell the children that in today's lesson they will work with a set of 10 objects. Show them the flashcard 5 and put 5 stones on it. Show them the flashcard 2 and put 2 stones on it. Ask how many stones there are altogether. Show them how to count the stones. Say, '5 stones add 2 stones equals 7 stones'. Repeat with 3 stones and 4 stones.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give each pair 10 stones. Ask them to make 2 sets of stones and to say the addition, e.g. '4 stones add 5 stones equals 9 stones'.

Now ask one child of each pair to make the 2 sets and the other child to say the addition. Tell them to take turns to make different sets.

Now show them how to make 3 sets of stones and to combine them to make a group of 10, e.g. 2 stones add 3 stones add 5 stones equals 10 stones. Ask children to practise making 3 sets of objects.

Move around the class and observe the children combining their sets. Help those that need it. If children are finding it too easy, give them two more stones to put into their sets.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one of their additions. Do the other children agree with their answer? Ask other pairs to show their additions.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Sing '10 ripe pawpaws'.

TERM 1 WEEK 4 WEDNESDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Separate a set of 5 objects into 2 groups of any number.

2 STARTER

Count 0 to 5 and count back 5 to 0 in the language that the children know best. Ask them to clap their hands while they count. Repeat with the children showing the correct number of fingers as they count.

3 INTRODUCTION

Remind the children of the work they did yesterday. On the board draw 2 circles. Show the children 5 objects and count them together. Draw one object in the first circle. Ask the children how many you should draw in the second circle. Draw 4 objects in the second circle. Repeat, drawing 2 objects in the first circle.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them 5 objects. Ask them to count the objects. Tell them to draw 2 circles to show how you could separate the objects into 2 sets. Now ask them to draw 2 more circles to show a different way to separate the objects. Repeat this until they have found all the ways to separate the 5 objects.

Move around the class and observe the children drawing their sets. Give help to those that need it. If children are finding it too easy, give them two more stones to put into their sets.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one of their drawings and to tell you how many objects are in each set. Do the other children agree with what they have drawn? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Sing '10 green bottles'.

TERM 1 WEEK 4 THURSDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Separate a set of 10 objects into 2 groups of any number.

2 STARTER

Count objects 0 to 10 and count backwards 10 to 0 in the language that the children know best. Ask the children to clap their hands while they count.

3 INTRODUCTION

Remind children of the work they did yesterday. On the board draw 2 circles. Show the children 10 objects and count them together. Draw 9 objects in the first circle. Ask the children how many you should draw in the second circle. Draw 1 object in the second circle. Repeat, drawing 8 objects in the first circle.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them 10 objects. Ask them to count the objects. Tell them to draw 2 circles to show how you could separate the objects into 2 sets. Now ask them to draw 2 more circles to show a different way to separate the objects. Repeat this until they have found all the ways to separate the 10 objects.

Move around the class and observe the children drawing their sets. Give help to those that need it. If children are finding it too easy, give them two more stones to put into their sets.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one of their drawings and to tell you how many objects are in each set. Do the other children agree with what they have drawn? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to help you to plan tomorrow's lesson.

Sing '5 little birds'.

TERM 1 WEEK 4 FRIDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Use number cards to combine and separate numbers 2 to 10.

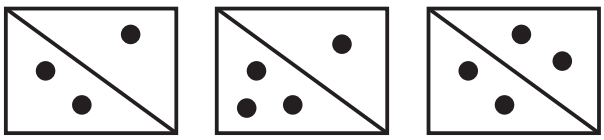
2 STARTER

Count fingers 1 to 10 and count back 10 to 1 in the language that the children know best.

Sing '1, 2, 3, 4, 5 once I caught a fish alive'.

3 INTRODUCTION

Draw 3 dots on a card and ask the children to count them. Draw a line through the 3 dots to separate out 2 dots and 1 dot. Ask them to count how many are on each side of the line. Repeat using 4 dots and show the different ways that the dots can be separated [1 and 3; 2 and 2].



4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them blank cards. Ask some pairs to draw 5 dots on the card, draw a line to separate the dots and count how many dots are on each side of the line. On another card, show a different way of separating 5 dots.

Ask other pairs to draw 6, 7, 8 or 9 dots on their cards and show all the different ways of separating them.

5 CONCLUSION AND ASSESSMENT

Show children a card with 10 dots on it. Ask them to tell you all the different ways to draw a line to separate the dots. Make a note of those children who are not able to do this and those finding it too easy.

Record the week's work in your class assessment folders.

Sing '1, 2, 3, 4, 5 once I caught a fish alive'.

TERM 1 WEEK 5 MONDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

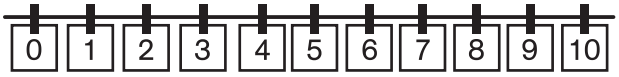
Note: The above information is for the whole week 5 Term1

1 OBJECTIVE

Make 2 or 3 sets of objects that combine to make numbers between 2 and 10.

2 STARTER

Peg flashcards 0 to 10 on a washing line. Together, count the numbers from 0 to 10 and back 10 to 0. Tell the class to shut their eyes. Move two of the numbers. Ask them which numbers you have moved. Repeat, moving different numbers each time.



3 INTRODUCTION

With the children, count out 6 pegs and hang them on the line. Show them how to separate them into 2 sets that together will make 6, e.g. 1 peg and 5 pegs equals 6 pegs. Ask how else you could separate them [2 and 4; 3 and 3; 4 and 2; 5 and 1].

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them 7 objects. Ask them to draw the different ways that you can make two sets that combine to make 7.

Move around the class observing the children. Give help where it is needed and give 2 more objects to those pairs finding it easy.

Now put 7 pegs on the line and show how the pegs can be separated into 3 sets that combine to make 7. Ask how else you could separate them into 3 sets.

Give the children 8 objects and ask them to draw all the ways that they can be separated into 3 sets that combine to make 8.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one of the ways in which they made 3 sets of objects that combine to make 8. Do the other children agree with what they have done?

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

Sing '1, 2, 3, 4, 5 once I caught a fish alive'.

TERM 1 WEEK 5 TUESDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Make 3 or 4 sets of objects that combine to make numbers between 2 and 10.

2 STARTER

Peg flashcards 0 to 10 on a washing line. Together, count the numbers from 0 and 10 and backwards 10 to 0. Tell the class to shut their eyes. Remove one of the numbers. Ask them which number you have removed. Repeat, removing a different number each time.

3 INTRODUCTION

Put 6 pegs on a washing line. Remind the children how you separated them into sets that combine to make 6. Add 3 more pegs and together count how many pegs are on the line.

Ask one child to show how they could be separated into 2 sets that combine to make 9. Does the class agree? Ask another child to make 3 sets and another to make 4 sets.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them 10 objects. Ask them to draw the different ways that you can make 3 sets that combine to make 10.

Move around the class observing the children. Give help where it is needed and encourage them to find as many ways as they can.

Now ask them to draw the different ways that you can make 4 sets of objects that combine to make 10.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one of the ways in which they made 3 sets of objects that combine to make 10. Do the other children agree? Ask another pair to show a set of 4 objects. Does the class agree?

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

Sing '1, 2, 3, 4, 5 once I caught a fish alive'.

TERM 1 WEEK 5 WEDNESDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Collect 20 objects and break them into different sets that total 10.

2 STARTER

Peg flashcards 0 to 10 on to a washing line. Together, count the numbers from 0 to 10 and backwards from 10 to 0. Tell the class to shut their eyes. Move one of the numbers to a different place. Ask the class which number you have moved. Repeat, moving a different number each time.

3 INTRODUCTION

Show the children a set of 20 objects. Count them together. Tell the children they are going to make sets of objects that combine to make 10. Show them how to count out 10 objects and to separate them into 2 sets. Count the sets to show they combine to make 10. Repeat, making 3 or 4 sets that combine to make 10.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them 20 objects. Ask them to count the objects. Now ask them to make 2 sets of objects that will combine to make 10.

When they can do this confidently ask them to make 3 sets that combine to make 10 and then 4 sets that combine to make 10.

Move around the class observing the children. Give help where it is needed and encourage them to find as many sets as they can.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one of the ways in which they made 3 sets of objects that combine to make 10. Does the class agree?

Ask another pair to show 4 sets of objects. Does the class agree?

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

TERM 1 WEEK 5 THURSDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Match number cards with sets of objects and combine number cards and sets to come up with totals.

2 STARTER

Clap your hands 5 times. Ask the children to tell you how many times you clapped. Repeat for different numbers between 1 and 10.

3 INTRODUCTION

Peg flashcards 0 to 10 on to a washing line. Together, count from 0 to 10 and backwards from 10 to 0.

On the board draw a set of 3 coconuts. Count them. Ask which number on the number line would match the number of coconuts. Draw a set of 4 coconuts. Ask which number on the number line would match this number of coconuts.

Ask how many coconuts altogether. Count the coconuts and say, '3 coconuts add 4 coconuts equals 7 coconuts'. Now show the flashcards for 3 and 4 and say, '3 add 4 equals 7'. Repeat with other numbers.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them 2 number cards. Ask them to put the correct number of objects next to each card and say how many objects there are altogether, e.g. '5 shells add 2 shells equals 7 shells'. Give them 2 new cards and repeat.

Move around the class observing the children. Give help where it is needed and give bigger number cards to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show their sets and to tell you how many objects they have altogether. Does the class agree? Ask another pair to show a set of 4 objects. Does the class agree?

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

TERM 1 WEEK 5 FRIDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Use number cards to combine and separate numbers 0 to 10.

2 STARTER

Play 'I say, you say'. The rule is 1 more, e.g. 'I say 3, you say 4'. Repeat for all numbers from 0 to 9. Change the rule to 1 less, e.g. 'I say 7, you say 6'. Repeat for all numbers from 1 to 10.

3 INTRODUCTION

Peg the numbers 0 to 10 on to a washing line. Draw 10 large dots on the board, count them and find the 10 on the number line. Ask a child to draw a line through the dots to make 2 sets. Ask the class to count the dots in the first set. Find the number on the washing line that is the same. Repeat for the second set. Show the numbers and say, for example, '10 is the same as 3 add 7'. Repeat using different numbers.

4 TEACHER AND STUDENT ACTIVITY

Give children blank cards and ask them to draw 10 dots and to draw a line through the dots to make 2 sets. Count how many dots are in each set and say, for example, '10 is the same as 4 add 6'. Repeat, making sets with different numbers.

Move around the class observing the children. Give help where it is needed and encourage them to find as many ways to form sets as they can.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show one their sets and to say the words that go with it, e.g. '10 is the same as 2 add 8'. Does the class agree? Repeat with another pair. Does the class agree?

Make a note of those children who are not able to do this and those finding it too easy.

Record the week's work in your class assessment folders.

Say the chant '1 2 3 catch a fly'.

TERM 1 WEEK 6 MONDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

Note: The above information is for the whole week 6 Term1

1 OBJECTIVE

Count objects from 0 to 10 and count backwards from 10 to 0 in the language that the children know best.

2 STARTER

Take the children into the playground. Put them into a line and tell them to walk forward, counting each step from 1 to 10. Tell them to stop, turn around and walk back as they count backwards from 10 to 1. Repeat the activity.

3 INTRODUCTION

Teach the children 'There were 10 in the bed'.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to hold up all of their fingers. Ask how many fingers they have. Tell them to count backwards from 10, putting 1 finger down as they count back each number. Tell them to say the word zero when they have no fingers left. Now tell the children to start at zero and count forward, putting 1 finger up as they count each number. Repeat this activity until the children are confident.

Tell the children to watch carefully. Put your hands behind your back. Bring them out, show the children 6 fingers and quickly put them back again. Ask how many fingers you showed. Repeat with different numbers of fingers from 0 to 10.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 10 and backwards from 10 to 0 using fingers. Ask small groups to repeat this. Quickly show 7 fingers and ask how many. Repeat with 9 fingers.

Make a note of those children who are not able to answer and those finding it too easy. Use this information when you are planning tomorrow's lesson.

Sing 'There were 10 in the bed'.

TERM 1 WEEK 6 TUESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Say the numbers 0 to10 in the children's language and match them with the English words for 0 to 10.

2 STARTER

Children make 10 jumps, claps, steps or knocks and count each one.

3 INTRODUCTION

Remind children of the English words for numbers 0 to 10.

Together, use fingers to count from 0 to 10 in the language the children know best. Repeat using English words.

4 TEACHER AND STUDENT ACTIVITY

Call out a number in the children's own language and ask what it is in English. Repeat for numbers between 0 and 10. Now, call out numbers in English and ask what they are in the children's own language.

Put the children in pairs and ask them to count different objects 0 to 10 in English.

In the same pairs, ask one child to say a number in English and the other to say it in their own language. Take turns to do this.

Sing 'There were 10 in the bed'.

5 CONCLUSION AND ASSESSMENT

Hold up 7 fingers. Ask one pair the number in the children's own language and in English. Does the class agree? Repeat for all numbers from 0 to 10.

Make a note of those children who are not able to answer and those finding it too easy. Use this information when you are planning tomorrow's lesson.

TERM 1 WEEK 6 WEDNESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Translate 0 up to 10 into English and count objects 0 up to 10 and backwards 10 to 0 in both the child's language and English.

2 STARTER

Sing '5 little birds' and '10 ripe pawpaws'.

3 INTRODUCTION

Together, count from 0 to 10 in English. Play 'I say, you say'. The rule is that you say a number from 0 to 10 in the local language and the children say the number in English. Change the rule so that you say the number in English and they say it in the local language.

4 TEACHER AND STUDENT ACTIVITY

Put 10 chairs in the playground numbered 0 to 10. Take the children outside.

Call out a number between 0 and 10 in English. Tell the children to run and stand behind the correct chair. Repeat for other numbers from 0 to 10.

Call out a number in English and tell the children to run to the chair that is one more than the number. Repeat for other numbers from 0 to 9.

Repeat for one less than the number you call out.

Call out a number in English and ask the children to get into sets of that size. Repeat for other numbers from 1 to 10.

5 CONCLUSION AND ASSESSMENT

Sing 'There were 10 in the bed'.

Count from 0 to 10 and 10 to 0 in English and the children's own language. Repeat slowly and then quickly.

Make note of the children who found the games difficult and those who found them easy. Use this information when you are planning tomorrow's lesson.

TERM 1 WEEK 6 THURSDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count sets of 1 to 10 objects in both the children's language and English.

2 STARTER

Clap your hands 5 times. Ask the children to tell you the number of claps. Repeat for all numbers 1 to 10.

3 INTRODUCTION

Together, count from 0 to 10 in English. Play 'I say, you say'. The rule is that you say a number from 0 to 10 in the local language and the children say the number in English. Change the rule so you say the number in English and they say it in the local language.

4 TEACHER AND STUDENT ACTIVITY

Show the children a string with sets of objects like the one below. Count the sets of objects on the string, e.g. 1 1,2 1,2,3 1,2,3,4

Put children into pairs. Give them a string and coloured shapes, e.g. circles, squares, triangles and diamonds. Tell them to string them in sets starting with 1 shape, then 2 and so on to 10.

Display children's work in the classroom.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show their string of shapes. Ask the class if they think the string is correct. Together count from 1 to 10 in English. Repeat with 2 more pairs.

Make note of the children who found the strings difficult and those who found them easy. Use this information when you are planning tomorrow's lesson.

TERM 1 WEEK 6 FRIDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count objects and numbers 0 to 10 in both the children's language and English.

2 STARTER

Quickly show a flashcard with 4 squares on it and then hide it. Ask the children to tell you the number in English and in their own language. Show them the card again and count the squares. Were they correct? Repeat with other numbers from 0 to 10.

3 INTRODUCTION

Peg the same flashcards on a washing line in order from 0 to 10. Count them together. Ask the children to close their eyes and take away one of the cards. Ask them which one has been removed. Repeat with other numbers from 0 to 10.

4 TEACHER AND STUDENT ACTIVITY

Draw a number track 0-10 in the playground. Take the children outside.

Shout out a number and choose a child to make that many jumps along the track. The other children clap and count as the child jumps. Repeat with different children and different numbers.

Roll a big dice made from a cardboard box. Children say the number on the dice and move that many steps along the number track. Repeat until they have reached the end of the track.

Sing number songs in English, e.g. '5 little birds', '10 in the bed', '5 little piggies'.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 10 and back from 10 to 0 in English. Say a number and ask the children to clap their hands that many times. Repeat with all numbers from 0 to 10.

Make note of the children who found the counting and clapping difficult and those who found it easy. Record the week's work in your class assessment folders.

TERM 1 WEEK 7 MONDAY **TIME**

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

Note: This lesson can be used asd an introductory lesson for Time

1 OBJECTIVE

Tell what things are used to mark time, e.g. sun.

2 STARTER

Ask the children questions about time, e.g. how do you know it is time to get up? How do you know it is bedtime? How do you know it is time to have your meals?

3 INTRODUCTION

Talk with the children about things they use to help them know what time of day it is. This might include things like the sun, stars and moon, the school bell, people moving around, etc.

4 TEACHER AND STUDENT ACTIVITY

Teach the children the words sun, moon, stars, day and night.

Ask the children to think about things they do in the day and in the night.

Draw a chart on the blackboard with 1) a sun and 2) a half moon and stars. Fill it in with the children's ideas. Tell the children to draw a picture of something they do in the day or night. Discuss the pictures.

5 CONCLUSION AND ASSESSMENT

Do the pictures show day or night scenes? How can you tell? Show children flashcards with drawings of the sun, moon in its different stages and stars and ask them to say the correct words.

Take note of children who give good answers and those who cannot answer. Use this information to help you plan tomorrow's lesson.

TERM 1 WEEK 7 TUESDAY **TIME**

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

1 OBJECTIVE

Tell what they do in the morning, at midday, in the afternoon and at night.

2 STARTER

Show children flashcards with drawings of: the sun in the sky at different times, a half moon and stars and ask them to say any words they know to show what time it is in the picture.

3 INTRODUCTION

Explain that the day is divided into different parts. Introduce the words morning, midday, afternoon, night.

Explain that morning is the first part of the day, midday is the middle of the day, afternoon is after midday and night is when the sun has gone down.

Mix up the cards, show them to the children again and ask them what time is on the cards.

4 TEACHER AND STUDENT ACTIVITY

Ask the children what they do in different parts of the day.

Take the children into an open area where they can all move around.

Mark out 4 spaces, one for each part of the day. Call out different activities, e.g. sleep. Children run to the space that matches the activity. Note who was quickest and who could not go to right place. Give help to those who need it.

5 CONCLUSION AND ASSESSMENT

Back indoors, say an activity. Class say what time of day they do that activity.

Say the words for different parts of the day and ask children what activities they do at these times.

Ask some children: what is the sky like at night/morning/midday? Where is the sun? See if the class agree with their answers and correct mistakes using the flashcards. Use this information to help you plan tomorrow's lesson.

Repeat the starter activity with children whom you think need more practice.

TERM 1 WEEK 7 WEDNESDAY **TIME**

1 OBJECTIVE

Draw pictures of activities done in the morning, at midday, in the afternoon and at night.

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

2 STARTER

Introduce numbers 11 and 12. The children chant numbers from 1 to 12 and/or sing a song with numbers going up to 12.

3 INTRODUCTION

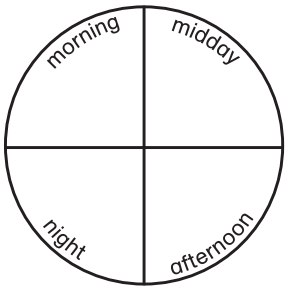
Remind the children about the work they did yesterday and tell them that today they will be doing drawings to show their favourite activities in the morning, at midday, in the afternoon and at night.

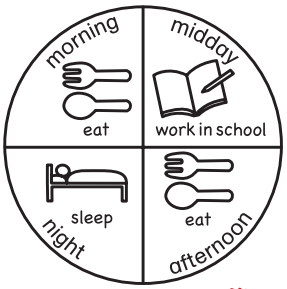
4 TEACHER AND STUDENT ACTIVITY

Show pictures or drawings of different activities and ask the children when these activities would happen, e.g. of a child at school and ask if this would happen at night.

In pairs, ask children to tell their friend something they like to do and when it usually happens.

Now give the children a circle divided into 4 sections and ask them to draw something that happens at each time of the day.





5 CONCLUSION AND ASSESSMENT

Show children's drawings to the class and ask when they think the activities happen. Ask the class to say something good about some of the drawings. You say what is good about the rest.

Assess understanding from looking at the drawings and listening to what the children say. Use this information to help you plan tomorrow's lesson.

TERM 1 WEEK 7 THURSDAY **TIME**

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

1 OBJECTIVE

Describe activities done in a day in hours, e.g. 6 o'clock, 10 o'clock, 12 o'clock, 7 o'clock at night, etc.

2 STARTER

Remind the children about numbers 11 and 12. The children chant numbers from 1-12 or sing a song with numbers going up to 12.

3 INTRODUCTION

Teach the word: o'clock. Show a clock face and explain that many people use a clock to tell the time. Point to each number and say 1 o'clock, 2 o'clock, up to 12 o'clock. Children repeat after you.

4 TEACHER AND STUDENT ACTIVITY

Explain that the clock starts at 1 o'clock and goes up to 12 o'clock, then starts again. Show 12 o'clock and say that 12 o'clock midday is the middle of the day and 12 o'clock midnight is the middle of the night. Ask what the children do at midday and midnight.

Show 6 o'clock and say that at 6 o'clock in the morning the sun rises and at 6 o'clock at night the sun sets. Ask what the children do at 6am and 6pm.

Take the children outside. Draw a big clock face with 12 and 6 in the playground and call out: sunrise, midday, sunset and midnight. The children run to the correct part of the clock and tell a friend one thing they would do at this time.

5 CONCLUSION AND ASSESSMENT

Show a clock face and ask the children to point to 12 o'clock and 6 o'clock. Ask the children to tell their favourite activities for these times of day.

Assess the children by observing them during the clock game and by listening to their answers in class. Use this information to help you plan tomorrow's lesson.

TERM 1 WEEK 7 FRIDAY **TIME**

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

1 OBJECTIVE

Use informal units to describe and tell time.

2 STARTER

Show a clock face at 6 o'clock or 12 o'clock. Say day, night, morning, afternoon. Remind children of the words sunrise, midday, sunset and midnight.

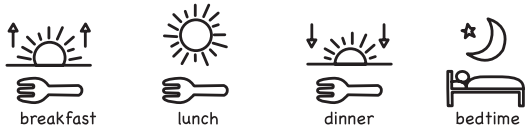
Say some activities and get the children to say when they would happen.

3 INTRODUCTION

Explain the three meals: breakfast, lunch and dinner and explain what time these meals are taken by using the clock face and the words morning, midday, afternoon, night, 6 o'clock and 12 o'clock.

4 TEACHER AND STUDENT ACTIVITY

Introduce the words breakfast time, lunchtime, dinnertime, bedtime. Show flashcards of the 3 meals and bedtime.



Get the children to work in pairs and tell each other what they eat, drink or do at breakfast time, lunchtime, dinnertime and bedtime.

5 CONCLUSION AND ASSESSMENT

Say the words breakfast time, lunchtime, dinnertime, bedtime and ask children to say what they do/eat at these times. Ask what their favourite foods/drinks are.

Assess the children by observing them talking in pairs and by listening to their answers. Record the week's work in your class assessment folders.


5t
10t
20t
9th SOUTH PACIFIC GAMES
50t
K1
PAPUA NEW GUINEA
1985
PAPUA NEW GUINEA
1976
PAPUA NEW GUINEA
1980
PAPUA NEW GUINEA
1991
PAPUA NEW GUINEA 1975


2
SPECIMEN
Two Kina
Bank of Papua New Guinea


Bank of Papua New Guinea
2
Two Kina
SPECIMEN
AA 00000000
AA 00000000


5
SPECIMEN
Five Kina
Bank of Papua New Guinea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Five Kina
SPECIMEN
AY 08347550
AY 08347550


10
SPECIMEN
Ten Kina
Bank of Papua New Guinea


Bank of Papua New Guinea
10
Ten Kina
SPECIMEN
AR 08543978
AR 08543978


20
SPECIMEN
Twenty Kina
Bank of Papua New Guinea


Bank of Papua New Guinea
20
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SPECIMEN
AA 07000293
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TERM 1 WEEK 8 MONDAY **MONEY : COUNTING**

1 OBJECTIVE

Sort coins into different value groups (5t, 10t, 50t and K1) and sort notes into different value groups (K2, K5, K10 and K20).

2 STARTER

Introduce numbers up to 20. Put a number line up to 20 on the board and count together with the class.

3 INTRODUCTION

Ask if the children have seen any money. What types of coin or note do they know? Do they know the colours of the notes? You can use paper copies of coins and notes. Show the class 5t, 10t, 20t, 50t and K1 coins and ask them to identify what animal they see on each coin. Show the notes and ask the class to say the colours. Point out the numbers on the coins and notes.

No content standard for this week 8's lesson on Money under strand Quantities and Measurement.

These lessons could be taught under strand Number and Operation using topic of counting

LESSON TOPIC: Money

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

4 TEACHER AND STUDENT ACTIVITY

Put the class into pairs and provide half of them with a set of coins each (5t x20, 10t x10, 50t x4 and K1 x20) and the second group of pairs with a set of notes each (K2 x10, K5 x4, K10 x4 and K20 x2).

Tell them to sort the coins or notes into value groups and count how many are in the different groups. How many 5t, 10t, 20t, 50t and K1? How many K2, K5, K10 and K20?

Note which pairs have managed to sort them and count them correctly. Make sure they have not lost any of the coins/notes.

The two groups swap coins/notes and repeat the exercise.

5 CONCLUSION AND ASSESSMENT

Ask students how many coins (5t, 10t, 20t, 50t and K1) and how many notes (K2, K5, K10 and K20) are in the different value groups. Do they all agree? Note which children did not count correctly and remember this when planning tomorrow's lesson.

Ask questions: Which is the biggest coin? Which is the smallest? Are all the coins circles? What is different about the K1 coin? What pictures can we see on the notes?

TERM 1 WEEK 8 TUESDAY **MONEY : COUNTING**

1 OBJECTIVE

Group 10t coins to make K1 and group K10 notes to make K20.

2 STARTER

Display different coins and ask children to name them (5t, 10t, 20t, 50t and K1) and arrange them from the smallest value to the largest. Tell them today is all about 10s.

3 INTRODUCTION

Demonstrate adding coins by putting together two 10t coins to make 20t, three 10t coins to make 30t, all the way up to ten 10t coins to make K1. Show two K10 notes and say this makes K20.

No content standard for this week 8's lesson on Money under strand Quantities and Measurement.

These lessons could be taught under strand Number and Operation using topic of counting

LESSON TOPIC: Money

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

4 TEACHER AND STUDENT ACTIVITY

Divide the class into pairs and give each pair 10t coins x10 and K10 notes x2.

Ask the children to make piles of 2 coins. How many piles have they made? How much money is in each pile? How much money is there in total?

Ask them to make piles of 5 coins. How many piles have they made? How much money is in each pile? How much money is there in total?

Ask them to make a pile of 10 coins. How many piles have they made? How much money is there in each pile? How much money is there in total?

Ask them to hold up the two K10 notes. How much money do they have?

Ask the children to make piles of 3 coins. How many coins do they have left? Repeat with different numbers of coins.

Ask them to hold up one K10 and 3 coins. Write on the board the total. Repeat with different amounts.

5 CONCLUSION AND ASSESSMENT

Ask questions: How many coins make K1? If I have three 10t coins, how many more do I need to make K1? Give them time to find the answer with the coins. Repeat with different amounts.

Note any children who cannot find the answers and consider putting them with other partners in tomorrow's lesson.

TERM 1 WEEK 8 WEDNESDAY **MONEY**

1 OBJECTIVE

Group 5t coins to make K1 and group K5 notes to make K20.

2 STARTER

Display different coins and ask children to name them (5t, 10t, 20t, 50t and K1) and arrange them from the smallest value to the largest. Tell them today is all about 5s.

3 INTRODUCTION

Demonstrate adding coins by putting together two 5t coins to make 10t, three 5t coins to make 15t, all the way up to twenty 5t coins to make K1. Show four K5 notes and say this makes K20. Count 5, 10, 15, 20.

No content standard for this week 8's lesson on Money under strand Quantities and Measurement.

These lessons could be taught under strand Number and Operation using topic of counting
LESSON TOPIC: Money

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

4 TEACHER AND STUDENT ACTIVITY

Repeat the lesson from yesterday with 5t coins and K5 notes.

5 CONCLUSION AND ASSESSMENT

Hold up an item, e.g. a pencil, and say it costs 95t. Ask how much more you need to make K1. Repeat with different items and prices.

Note any children who cannot find the answer and consider putting them with other partners in tomorrow's lesson.

TERM 1 WEEK 8 THURSDAY **MONEY**

1 OBJECTIVE

Group 20t coins to make K1 and group K2 notes to make K20.

2 STARTER

Display different coins and ask children to name them (5t, 10t, 20t, 50t and K1) and arrange them from the smallest value to the largest. Tell them today is all about 20s.

3 INTRODUCTION

Ask the children if they have ever gone to the market or a shop. What was the last thing they went to buy or saw being bought? Ask them how you buy things in a shop. What happens to the money? Do you ever get any money back? Show them that five 20t coins make K1 and that five K2 notes make K10.

No content standard for this week 8's lesson on Money under strand Quantities and Measurement.

These lessons could be taught under strand Number and Operation using topic of Counting

LESSON TOPIC: Money

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, prepare some small items or pictures of items and label them with prices: 20t, 40t, 60t, 80t and K1.

Put the children into pairs. Give one child in each pair some items with prices. Give the other child plenty of coins (you can use pieces of card). Tell them that the one with the items is the shopkeeper. The one with the coins is buying things. Tell them to make sure they give the right number of coins.

Demonstrate this at the front of the class with one of the pairs.

Tell the children to try to buy something from their shopkeeper. Have they given the right number of coins? Have they got the right item?

Get the children to swap roles and repeat.

5 CONCLUSION AND ASSESSMENT

Count with five coins up to K1. Ask: 'If I have three 20t coins, how many more do I need to make K1?' Repeat with different amounts.

Note any children who do not manage and consider giving them extra help tomorrow. Note any children who were very good at this and consider making them the shopkeeper tomorrow.

TERM 1 WEEK 8 FRIDAY **MONEY**

1 OBJECTIVE

Group 50t coins to make K1 and group different notes to make K20.

2 STARTER

As yesterday, ask the children if they have ever gone to the market or a shop. What was the last thing they went to buy or saw being bought? Ask them how you buy things in a shop. What happens to the money? Do you ever get any money back? Show them that two 50t coins make K1. Show them how different notes make different totals.

3 INTRODUCTION

Before the lesson, prepare items with price labels. Make sure you have enough coins to buy all the items. Tell the children that today they are going to play at shopping. Pick out some of the children to be shopkeepers. Give them the items and some coins. Pair up the other children. Give the pairs most of the coins. Tell them they are going to buy things from the shopkeepers.

No content standard for this week 8's lesson on Money under strand Quantities and Measurement.

These lessons could be taught under strand Number and Operation using topic of counting

LESSON TOPIC: Money

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

4 TEACHER AND STUDENT ACTIVITY

Split the class into groups, one shopkeeper and a pair of customers in each group. Let the customers buy things from the shopkeepers. Walk around, making sure they are being careful with the money and paying the correct prices. Talk about giving change if they do not have the right coins. Lend some children money if they need it. If there is time, let other children try being the shopkeepers.

5 CONCLUSION AND ASSESSMENT

Calm everyone down. Sit them back in their places. Make sure you get all the coins and items back.

Ask them if it was like going to a real shop. What was the same? What was different? What did they buy? Do they remember how much it cost? What happened if they did not have the right money?

Note any children who did not manage to use the money correctly and record it in the class assessment folder.

TERM 1 WEEK 9 MONDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count objects of different colours, shapes and sizes from 0 to 15.

2 STARTER

Play 'What's in my bilum?'. Ask a child to pick out an object and ask questions, e.g. What is it? Where do you find it? Is it heavy or light? Repeat with another child and another object.

3 INTRODUCTION

Teach the children to count from 0 to 15 and backwards from 15 to 0. Clap as you count each number. Repeat until they are confident.

4 TEACHER AND STUDENT ACTIVITY

Shuffle flashcards with dots from 0 to 15 and ask the children to help you to peg them on to a washing line in the correct order. Count from 0 to 15.

Lay the flashcards on the floor in the correct order. Put a pile of objects on the floor. Ask a child to pick up 6 small objects and put them on the correct flashcard. Ask the rest of the class if they agree. Repeat with another child and another number.

Put the children into pairs and take them outside. Give each pair a flashcard and ask them to collect that number of objects, e.g. small stones, sticks, leaves, shells, etc. When they have completed that task give them a second flashcard for a similar task. Observe them and help those who are not able to do it. If some find it easy, give them a card with a larger number of dots.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and backwards from 15 to 0. Show a flashcard and ask how many dots are on it. Repeat with other flashcards.

Make note of the children who found the counting and matching difficult and those who found it easy. Use this information when planning tomorrow's lesson.

TERM 1 WEEK 9 TUESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Compare and order objects in 1s, 3s and 5s.

2 STARTER

Chant '1, 2, 3 I caught a fly, 4, 5, 6 I held it hard, 6, 7, 8 I let it go, 9, 10 I cleaned my hands'.

3 INTRODUCTION

Count together from 0 to 15 and backwards from 15 to 0.

Show flashcards for 1, 3 and 5. Ask the children to count the dots on each card. Choose children to stand at the front in a set of 1, a set of 3 and a set of 5. Ask the rest of the class to compare the sets of 1 and 3 and say whether 3 is more than 1 or less than 1. Repeat with sets of 5 and 3 and 1 and 5.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them small objects to make into sets of 7, 9, 11, 13 and 15. Ask them to compare the sets and say, for example, '7 is more than 5' or '11 is less than 13'.

Move around the class and observe the children. Give help to those who need it and give larger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and backwards from 15 to 0. Choose one pair of children and show them flashcards for 7 and 11. Ask them to compare the numbers. Do the rest of the class agree? Repeat with different pairs and different numbers.

Make note of the children who found the counting and matching difficult and those who found it easy. Use this information when planning tomorrow's lesson.

TERM 1 WEEK 9 WEDNESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Compare and order odd and even numbers within a set of 15.

2 STARTER

Play 'Get into'. Call a number from 0 to 15. Ask the children to get into groups of that number. Repeat for odd and even numbers between 0 and 15.

3 INTRODUCTION

Say 'I'm thinking of a number that is more than 6 but less than 8'. Ask the children to tell you the number. Repeat with other numbers up to 15.

4 TEACHER AND STUDENT ACTIVITY

Say the words 'even numbers' and ask the children to repeat them. Bring 8 children to the front and tell the class that if a number is even, every child will have a partner. Put them into pairs and ask if 8 is an even number. Repeat with 6 and 12 children. Now bring 9 children to the front and put them into pairs. Ask if this number is even. Explain that because not every child has a partner it is not an even number — it is an odd number. Ask the children to say 'odd number'. Repeat with other odd numbers.

Put the children into pairs and give them some beads. Ask them to make a set of even numbers between 2 and 14 and compare them, e.g. 10 is less than 12. Now ask them to make a set of odd numbers and compare them.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show 2 even sets of numbers and compare them. Do the rest of the class agree? Ask another pair to compare 2 sets of odd numbers.

Line the whole class up and put them into pairs. Is there an odd number or an even number of children in the class?

Make note of the children who found the counting and matching difficult and those who found it easy. Use this information when planning tomorrow's lesson.

TERM 1 WEEK 9 THURSDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Compare and order objects in line, despite their colour or shape, and know which is first, second, third and last.

2 STARTER

Show flashcards with 7 dots. Ask if the number is odd or even. Repeat for numbers from 1 to 15.

3 INTRODUCTION

Ask the children to repeat after you, 'first, second, third, last'. Stand 4 children in line. Point to the front child and say 'first'. Point to the next and say 'second'. Point to the next and say 'third'. Point to the next and say 'last'. Repeat, asking the children to say the words with you.

4 TEACHER AND STUDENT ACTIVITY

Put 4 different objects, e.g. a red stick, a green leaf, a white shell and a stone in a line. Ask the children which object is first? Second? Third? Last? Tell them that the last is always at the end of the line. Repeat the activity with a different number of objects in the line.

Put the children into pairs and give them different objects to put in a line. Ask them to tell each other which is first, second, third and last. Repeat, making different lines.

5 CONCLUSION AND ASSESSMENT

Line up 6 children. Ask the class to name the first, second, third and last child.

Choose 1 pair of children to show 1 of their lines of objects and to say which objects are first, second, third and last. Do the rest of the class agree? Repeat for other pairs.

Make note of the children who found the task difficult and those who found it easy. Use this information when planning tomorrow's lesson.

TERM 1 WEEK 9 FRIDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Order and compare differences and similarities.

2 STARTER

Bring 6 children to the front of the class and put them into a line. Ask the class to name the first, second, third and last in the line. Together, count the children and ask if it is an odd or even number. Repeat with other numbers of children.

3 INTRODUCTION

Teach the words 'similar or the same' and 'different or not the same'. Ask the children to repeat the words.

Bring 2 boys to the front and ask the class how they are the same and how they are different. Repeat with other children, both boys and girls.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them a group of objects. Ask one of the pair to make a set of objects that are the same or similar in some way. Ask the second child to say why they are similar. Ask the second child to make a set of objects that are different and ask the first child why they are different. Repeat the activity with children taking it in turns to make sets.

Move around the class observing the children and asking them to tell you how things are similar or different. Help those who are having difficulties.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show one of their sets and explain how the objects are similar or different. Do the rest of the class agree? Repeat for other pairs.

Finish by singing the children's favourite number song.

Make note of the children who found the task difficult and those who found it easy.

Record the week's work in your class assessment folders.

TERM 2 WEEK 2 MONDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count objects from 0 to 15 and backwards from 15 to 0 in the language that the children know best.

2 STARTER

Sing a number song in the language that the children know best.

3 INTRODUCTION

Show the children how to count from 0 to 15 using their fingers and toes or other objects.

Show them how to count backwards from 15 to 0.

4 TEACHER AND STUDENT ACTIVITY

Show a flashcard with 10 dots. Ask the children to count the dots. Repeat with other flashcards from 0 to 15.

Bring 15 children to the front and, together, count them from 1 to 15 and backwards from 15 to 1.

Put the children in pairs and ask them to draw sets of objects from 0 to 15.

Give each pair of children a pile of objects and ask them to practise counting from 0 to 15 and backwards.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and backwards. Ask one pair of children to show you one of their sets and say how many objects they have drawn. Do the rest of the class agree? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

Sing your number song to finish.

TERM 2 WEEK 2 TUESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Say the numbers from 0 to 15 in the children's language and match them with the English words for 0 to 15.

2 STARTER

Ask the children to make 15 jumps, claps, steps or knocks and to count each one.

3 INTRODUCTION

Show the children again how to count from 0 to 15 using their fingers and toes or other objects.

Show them how to count backwards from 15 to 0.

4 TEACHER AND STUDENT ACTIVITY

Revise counting in English from 0 to 10 and backwards from 10 to 0. Teach the children the English words for 11 to 15. Get them to practise counting in English from 0 to 15 and backwards from 15 to 0.

Play 'I say, you say'. The rule is 'I say the number in your home language, you say it in English'. Play this with all the numbers from 0 to 15.

Put children in pairs and give them objects to count from 0 to 15 and backwards from 15 to 0, first in their home language and then in English.

Move around the class, listening to the children and helping those that need it.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and backwards in English. Play 'I say, you say' again.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 2 WEDNESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Translate 0 to 15 into English and count objects from 0 to 15 and backwards from 15 to 0, in both the children's language and English.

2 STARTER

Ask the children to make 15 jumps, claps, steps or knocks and to count each one.

3 INTRODUCTION

Remind the children how to count from 0 to 15 and backwards from 15 to 0 using their fingers and other objects, in both the children's language and English.

4 TEACHER AND STUDENT ACTIVITY

Take the children outside.

Ask the children to count from 1 to 15 in English, walking 1 step forward for each number. Ask them to count backwards, walking 1 step back for each number.

Say a number in English and ask the children to do that many jumps.

Ask the children to stand behind a line and take 15 steps forward, counting as they walk. See who gets furthest from the line.

Observe the children carefully.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and backwards from 15 to 0 in English. Say a number in English and ask the children to clap their hands that many times.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 2 THURSDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Translate 0 to 15 into English and count objects from 0 to 15 and backwards, in both the children's language and English.

2 STARTER

Ask the children to make 15 jumps, claps, steps or knocks and to count each one.

3 INTRODUCTION

Remind the children how to count from 0 to 15 and backwards from 0 to 15 using their fingers and other objects, in both the children's language and English.

4 TEACHER AND STUDENT ACTIVITY

Sing '5 little birds'.

Put the children into pairs. Give them different coloured shapes to string together. Ask the children to make strings with 1 shape, 2 shapes and so on up to 15 shapes. Hang the strings up in the classroom in the correct order from 1 to 15.

Use the strings to count from 1 to 15 and backwards from 15 to 1.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and backwards from 15 to 0 in English. Ask one pair of children to show their favourite string and to count the shapes on it. Ask the class if the pair have counted correctly. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 2 FRIDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count numbers and objects from 0 to 15 forwards and backwards, in both the children's language and English.

2 STARTER

Quickly show a flashcard with 6 shapes on it, then hide the card. Ask the children how many shapes there were. Show the card and count the shapes. Were the children correct? Repeat with different flashcards for numbers 0 to 10.

3 INTRODUCTION

Together, count from 0 to 15 and backwards from 15 to 0 using fingers, toes and other objects, in the children's language and English.

4 TEACHER AND STUDENT ACTIVITY

Say a number in the children's language and ask the children to say the word in English. Repeat for all numbers from 0 to 15.

Put the children into pairs and give each pair a pile of objects. Give each pair 2 flashcards with shapes on them. Ask them to count the shapes on one card, count that number of objects and put them next to the card. Ask the children to draw the card and their objects. Repeat with the second card.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and back from 15 to 0 in English. Ask one pair to show one of their pictures and to count the objects on it. Ask the class if the pair have counted correctly. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Write the information in your class assessment folders.

TERM 2 WEEK 3 MONDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.3

Note: The above information is for week 3 Term 2

1 OBJECTIVE

Put stones into groups of 2 and 3, 4 and 5, 6 and 7, etc. Compare the size: which is more, which is less?

2 STARTER

Use stones or seeds to play a game of 'Tell me how many objects are in my left hand and how many objects in my right hand'. Play the game by closing and opening the palms of the hands.

3 INTRODUCTION

Ask the children to say 'more than' and 'less than'.

Show the children a group of 5 stones and a group of 6 stones. Together, count each group. Compare the groups. Tell them that 6 is a bigger group and it has more stones than the group of 5. 5 is a smaller group and it has less stones than the group of 6. 6 is more than 5. 5 is less than 6.

Now show groups of 6 and 7. Count the stones. Ask which group has more and which group has less. Say '7 stones are more than 6 stones or 6 stones are less than 7 stones. 7 is more than 6. 6 is less than 7'.

Repeat with one more pair.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give them a pile of objects. Ask them to make groups of 2 and 3 and to tell each other which is more and which is less. Repeat for other numbers up to 15.

Move around the class observing the pairs. Give help to those who are having problems and give larger groups to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Together, count from 0 to 15 and back from 15 to 0. Ask one pair to show you how they compared 2 of their groups. Does the class agree? Repeat with other pairs. Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 3 TUESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.3

1 OBJECTIVE

Comparing 2 groups: which is more, which is less?

2 STARTER

Show 2 flashcards with different numbers of shapes on them. Ask which card has more and which card has less. Repeat with other pairs of cards with numbers 0 to 15.

3 INTRODUCTION

Show the class a group of 5 objects. Tell them you want to make a bigger group. Ask how many stones you could put in it. Make this group. Ask the children to tell you which group has more and which has less. Repeat with a different number.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them some small objects. Say a number and tell them to make a group of objects that size. Now tell them to make a group with 1 more and a group with 1 less. Ask them to draw their groups. Now ask them to make a group with 2 more and a group with 2 less. Repeat with different numbers.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show you one of their drawings. Ask them the number they started with and which group has more. Does the class agree? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 3 WEDNESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD: P.1.3

1 OBJECTIVE

Comparing 3 groups: which is the most, which is least?

2 STARTER

Put flashcards 0 to 15 on a washing line. Together count from 0 to 15 and back from 15 to 0. Tell the children to close their eyes and remove one of the cards. Ask which card you have removed. Repeat removing different cards.

3 INTRODUCTION

Show the children how to make 3 groups of objects, e.g. groups of 2, 3 and 4. Ask them which is the smallest number. Tell them that we say the smallest number is the least. Ask the children to say 'least'. Ask them which is the biggest number. Tell them that we say the biggest number is the most. Ask the children to say 'most'. Show them how to put the groups in order from least to most. Repeat with groups of 3, 4 and 5.

4 TEACHER AND STUDENT ACTIVITY

Put the children into groups of 3 and give them some small objects. Ask them to make groups of 3, 4 and 5 and to tell each other which is the most and which is the least. Ask them to put them in the correct order from least to most. Repeat with other numbers.

5 CONCLUSION AND ASSESSMENT

On the board, draw 3 groups of 6, 4 and 8. Ask which number is the most and which is the least. Ask what is the correct order for the groups. Repeat with different numbers.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 3 THURSDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD : P.1.3

1 OBJECTIVE

Order numbers from 0 to 20.

2 STARTER

Sing ‘5 little birds’ and ‘10 ripe pawpaws’.

3 INTRODUCTION

Teach the children the numbers from 15 to 20 in the language they know best and in English. Count from 0 to 20 and show number flashcards as you count. Write the numbers 0 to 20 on the board and leave them there for the rest of the lesson.

4 TEACHER AND STUDENT ACTIVITY

Shuffle the flashcards. Pick one and together say the number. Peg it on a washing line. Pick another one. Say the number and ask if it comes before or after the number on the line. Peg it in the correct place on the line. Repeat this with all the flashcards from 0 to 20.

Put the children into pairs and give them 3 number cards to put in the correct order. When they can do this confidently give them 3 more.

5 CONCLUSION AND ASSESSMENT

Show the children a number flashcard and ask them to say the number. Repeat with all the numbers 0 to 20. Together count from 0 to 20 in English.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow’s lesson.

TERM 2 WEEK 3 FRIDAY **COMPARING AND ORDERING**

LESSON TOPIC: Comparing and Ordering

STRAND: Nuber and Operation

CONTENT STANDARD : P.1.3

1 OBJECTIVE

Order numbers from 20 to 0.

2 STARTER

Sing ‘5 little birds’ and ‘10 ripe pawpaws’.

3 INTRODUCTION

Together, count from 0 to 20 and back from 20 to 0. Show flashcards 0 to 5 and show children how to order the numbers backwards. Repeat with flashcards 0 to 10, 0 to 15 and 0 to 20.

4 TEACHER AND STUDENT ACTIVITY

Pick 5 children and give them the flashcards 0 to 5. Ask the class to put them in order from 5 to 0. Pick 5 more children and give them the cards 6 to 10. Ask the class to put them in order from 10 to 6. Repeat for 11 to 15 and 16 to 20.

5 CONCLUSION AND ASSESSMENT

Show the children a number flashcard and ask them to say the number. Repeat with all numbers 0 to 20. Together, count from 20 to 0 in English.

Make a note of those children who are not able to do this and those finding it too easy. Write this information in the class assessment folders.

TERM 2 WEEK 4 MONDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

Note: The above information is for the whole of week 4 Term 2

1 OBJECTIVE

Make and follow simple sound patterns, e.g. 1 clap, 2 claps.

2 STARTER

Play a clapping game with the children; ask the children to copy your pattern of claps. Start with a simple pattern and make it harder.

3 INTRODUCTION

Teach 5 different patterns by asking the children to clap, drum, jump, stamp feet and click fingers. Make the patterns and ask the children to copy them.

Start with simple patterns and make them harder.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and ask them to make at least five sound patterns for a friend to copy. Choose 3 children to teach their pattern to the whole class.

Ask the children to make a new pattern using more than just one sound and to teach it to a friend. Choose 3 children to teach their harder pattern to the class.

5 CONCLUSION AND ASSESSMENT

Ask the children where they can hear patterns of sounds, e.g. birds singing, sing-sing.

Play the clapping game again and add in actions.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 4 TUESDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Identify repeating patterns of colours and designs in common objects such as bilums, mats, tapa cloths and clay pots.

2 STARTER

Play the clapping and action game from Monday's lesson.

3 INTRODUCTION

Show the children 5 objects with patterns, such as bilums, mats, carvings. Ask them to tell each other what patterns they can see.

Ask the children where they can see other patterns, e.g. in clothes, on classroom walls.

4 TEACHER AND STUDENT ACTIVITY

Give pairs of children a sample of a pattern, e.g. a bilum, a cloth, a mat. Ask them to each draw the pattern.

Ask the children to show their patterns and drawings and explain what the patterns are.

Ask which patterns are their favourites and why.

5 CONCLUSION AND ASSESSMENT

Draw a simple pattern on the board with coloured chalk. Ask the children to explain the pattern to a friend.

Test the children by describing another pattern and asking them to draw it.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

Ask the children to collect 3 different patterns from home and to bring them to school tomorrow.

TERM 2 WEEK 4 WEDNESDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Repeat patterns using objects such as stones, sticks, shells, seeds, beads and leaves.

2 STARTER

Ask the children to present their collections of patterns from home.

Ask the children which pattern is their favourite and how it has been made. Ask them to explain the pattern.

3 INTRODUCTION

Tell the children they will make their own patterns.

Give out pots of objects, such as stones, sticks, shells and seeds. Show the children how to make patterns using the objects.

Start making a pattern and ask the children to start making the same pattern on their desks. Ask them to continue the pattern they have started.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to make a simple repeating pattern. Get them to ask a friend to copy the pattern and continue it.

Ask 3 children to choose a pattern each to show the class. Ask the rest to make their own copies and to continue the patterns.

5 CONCLUSION AND ASSESSMENT

Ask the children to choose their own pattern and to glue the objects down to make a pattern for display.

Ask the children which patterns are similar.

Assess whether the children made a pattern that repeats correctly. Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 4 THURSDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Make repeating patterns based on different shapes of different sizes on common objects such as bilums, mats, tapa cloths and clay pots.

2 STARTER

Put the children into pairs and give each pair coloured objects, e.g. beads. Use beads yourself to make different patterns and ask the children to copy the patterns and to continue them.

Ask the children to explain the patterns using colour words, e.g. red, blue, green. Ask them how many times the patterns are repeated.

3 INTRODUCTION

Show the children 5 of the different patterns that they collected yesterday. Ask them to explain to a friend how each pattern is made.

Ask the children what shapes and colours they see and how many times the patterns are repeated.

Ask the children if they like the patterns.

4 TEACHER AND STUDENT ACTIVITY

Ask each child to choose one pattern, e.g. on a clay pot. Ask them to make a copy of the pattern. Choose the best 3 to show the class.

Ask the children to make the same pattern but to change one thing about the pattern. Choose the best 3 to show the class.

5 CONCLUSION AND ASSESSMENT

Call out a colour pattern and ask children to arrange coloured objects into that order, e.g. 2 red beads, 1 green, 1 blue, 2 red, 1 green, 1 blue, etc.

Assess which children can make the pattern. Use this information to help you plan tomorrow's lesson.

TERM 2 WEEK 4 FRIDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Make repeating patterns using 1 or 2 objects and colours.

2 STARTER

Sing '10 ripe pawpaws'.

3 INTRODUCTION

Show a repeated pattern with more than one object, e.g. 2 sticks, 1 shell, 2 sticks, 1 shell. Ask the children to copy it and to continue the pattern.

Ask a child to show a new pattern with more than one object. Ask the class to copy it and to continue the pattern. Ask the children to explain the pattern.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to make 5 patterns for a friend, using more than one object and more than one colour.

Ask the children to explain to their friend what the patterns are. Ask them to tell their friend what their favourite pattern is.

Ask the children to choose 2 patterns and to change them.

5 CONCLUSION AND ASSESSMENT

Give out bottle tops to each child. Ask them to make patterns using the bottle tops, e.g. 3 bottle tops, 1 bottle top, 4 bottle tops.

Make a note of those children who are not able to do this and those finding it too easy. Write the information in your class assessment folders.

Ask the children to make a pattern over the weekend and bring it to school on Monday. They should use materials from home, e.g. clay, string, wool, leaves.

TERM 2 WEEK 5 MONDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

Note: The above information is for the whole of week 6 Term1

1 OBJECTIVE

Make different patterns with any objects.

2 STARTER

Ask the children to display the patterns they have made over the weekend. Which patterns are their favourites? Ask children to describe the patterns they have made.

3 INTRODUCTION

Show a collection of 10 objects (e.g. 5 bottle tops, 3 seeds, 2 leaves). Show that these can be arranged into different patterns.

4 TEACHER AND STUDENT ACTIVITY

Give each pair of children 10 objects. Ask how many different patterns they can make?

Ask them to say how many of each object there are in the pattern (e.g. 1 seed, 1 leaf, 2 tops, 1 seed, 1 leaf, 2 tops)

Choose 3 patterns to share with the class. Ask the children to make the same pattern. Ask them to make a pattern that uses all 10 objects.

5 CONCLUSION AND ASSESSMENT

Using only one kind of object (e.g. stones) get children to make a simple repeating pattern (e.g. 3 stones, 2 stones, 1 stone, 3 stones, 2 stones, 1 stone).

Ask the children to copy the pattern and explain it to their friend.

Ask them to change one thing about the pattern and choose 3 new ones to show the class. Ask them to choose one pattern and draw it.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 5 TUESDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Use the same objects to make different patterns.

2 STARTER

Use sticks to make a simple pattern of shapes. Ask the children to copy the pattern and continue it. Ask them how many sticks you used and what the pattern is?

Give the children 10 sticks each. Ask them to make a simple pattern. Choose 3 to show the class.

3 INTRODUCTION

Give the children 20 sticks each. The sticks should be the same length. Ask them to make a pattern that uses 4 sticks each time. Check their patterns. Show 3 correct ones to the class.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to make patterns that use 3 sticks, 2 sticks, etc.

Check their patterns each time. Choose 3 correct ones to show the class each time.

5 CONCLUSION AND ASSESSMENT

Test the children by asking them to make a pattern that uses 5 sticks. Choose 3 interesting patterns and ask all the children to make that pattern. See if they can improve the pattern by adding one stick.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 5 WEDNESDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Orally complete given patterns using objects.

2 STARTER

Make a pattern for the children to follow, e.g. clap your hands, stamp your feet, clap your hands, stamp your feet, hit your head, step forward, jump up. Ask the children to watch the pattern and then repeat it. Do this 3 times, making the pattern more complicated each time.

Put the children in pairs and ask them to invent their own pattern. Choose 3 for the class to try.

3 INTRODUCTION

Give out pieces of coloured wool. Orally describe a pattern, e.g. red, red, blue, green, and ask children to make it. Assess who can follow the oral instruction. Do this 5 times.

Ask a child to come up and describe a pattern that the rest of the class can make.

4 TEACHER AND STUDENT ACTIVITY

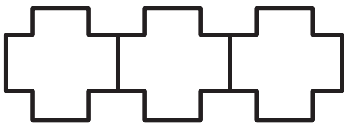
Put the children in groups of 4. One at a time, ask each child to describe a pattern and have the other children make it. Check to see that the children are making it correctly.

Then give out more objects and ask one child at a time to describe a pattern that the others can make, e.g. 2 coins, 4 sticks, 1 seed.

5 CONCLUSION AND ASSESSMENT

Draw 5 simple patterns on the board and ask children to draw them.

For example:



Assess which children can copy the pattern. See if they can continue the pattern.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 5 THURSDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Arrange the same objects in different ways to form patterns. Spot mistakes in patterns.

2 STARTER

Give out 20 sticks to every child. Ask them to make a pattern with 3 sticks. Choose 3 to show the class.

Now ask them to make a pattern with 4 sticks. Choose 3 patterns to show the class.

3 INTRODUCTION

Show the children a pattern with a deliberate mistake in it. Ask if they can spot the mistake.

Ask them to make a pattern for a friend with a mistake in it. See if they can spot the mistake.

Choose 3 patterns to show the class. Ask if they can spot the mistake and correct it?

4 TEACHER AND STUDENT ACTIVITY

Ask a member of the community to come and show the children cultural patterns (e.g. tattoos, carving, weaving, etc).

Help the children to prepare questions to ask the community member.

Ask the children to draw the patterns they are shown. See if they can make them in clay or wool.

5 CONCLUSION AND ASSESSMENT

Ask children about traditional patterns: who makes them, what kind of patterns they are, what they are made out of. Ask if the patterns mean anything.

TERM 2 WEEK 5 FRIDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Geometrical Figures

CONTENT STANDARD: P.4.1

1 OBJECTIVE

Recognise and complete simple number patterns that increase by 1 and 2, e.g. odd and even numbers.

2 STARTER

Play 'I say, you say', adding one and subtracting one.

e.g. Adding one:
'I say 5, you say ... [6]'
'I say 8, you say ... [9]'

3 INTRODUCTION

Tell the children you can make patterns with numbers. Write 1, 3, 5, 7, 9 and ask if the children can see a pattern in the numbers. Ask how much the numbers go up by in this pattern [2].

Get the children to continue the pattern [11, 13, 15, etc.].

4 TEACHER AND STUDENT ACTIVITY

Show the children 3 more simple number patterns (e.g. 2, 4, 6, 8 or 10, 9, 8, 7 or 3, 5, 7, 9). Ask them what the pattern is [+2, -1, +2]. Explain the patterns.

Ask the children to write the missing 3 numbers in these patterns:
5, 6, 7, ? ? ?
10, 8, 6, ? ? ?
1, 3, 5, ? ? ?
15, 14, 13, ? ? ?
? ? ? 9, 11, 13

5 CONCLUSION AND ASSESSMENT

Assess the children on:

- making a pattern from oral instructions
- continuing a simple +1, +2, -1, -2 pattern
- repeating a pattern of claps and movements
- inventing a pattern of objects and colours

Make a note of those children who are not able to do this and those finding it too easy. Write this information in the class assessment folders.

TERM 2 WEEK 6 MONDAY **PLANE SHAPES**

LESSON TOPIC: Plane Shapes

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

Note: The above information is for the whole of week 6 Term 2

1 OBJECTIVE

Pick out a circle from other shapes and identify objects that are similar to circles.

2 STARTER

Play 'What's in the bilum?'. Place an object, e.g. a tin of tuna, in the bilum and ask a child to feel the object and describe it. Ask how it feels, how heavy it is, what size it is. Get other children to ask the child questions about the object. Do this 3 times with different objects and different children.

3 INTRODUCTION

Introduce the word 'circle'. Show the children a collection of shapes on flashcards or on the board. Ask which ones are circles.

Ask how many lines a circle has? [1] Ask if objects that are circles can roll. [yes] Ask which of the shapes are not circles. Ask children if they can see any circles in the classroom.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to work in pairs. Get them to walk around the classroom and school and look for objects that look like circles and objects that do not look like circles. Ask them to try to find more than 10 objects.

Draw the children's suggestions on the board. Ask children to explain their choices.

5 CONCLUSION AND ASSESSMENT

Put 10 objects in a box, some of which have circles (e.g. flower, tin can, bottle top) and some which do not (e.g. banana, mobile phone, knife). Ask children to come up and choose objects that look like circles.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

For homework, ask children to draw a picture of 5 things that have circles in them. Remind children some circles are large (e.g. bottom of a bucket) and some are small (e.g. pencil lead, coins).

TERM 2 WEEK 6 TUESDAY **PLANE SHAPES**

LESSON TOPIC: Plane Shapes

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Pick out a rectangle from other shapes and identify objects that are similar to rectangles.

2 STARTER

Ask the children to list as many objects as they can that have a circle in them (e.g. coins, full moon, bucket, cut coconut, saucepan lid). Ask the children to trace the shape of a circle with their fingers. Ask the children to draw a circle shape in the sand, in their books or on their chalkboards.

3 INTRODUCTION

Teach the children what a rectangle is. Explain that it has 4 straight sides and that rectangles can be different sizes. Ask the children to find rectangles or objects that look like rectangles in the classroom.

Show the children a collection of shapes on flashcards or on the board. Ask which ones are rectangles. Ask which ones are circles. Ask how many lines a rectangle has [4]. Ask how many lines a circle has [1]. Ask which shapes are not circles or rectangles.

4 TEACHER AND STUDENT ACTIVITY

Ask children to walk around the classroom and school to find at least 10 objects that are rectangles and 5 objects that are circles. Then ask them to find 5 objects that are not rectangles and circles.

Draw the objects on the board in a table, e.g.

		
bucket lid	table top	spoon
1 kina coin	window frame	bush knife

5 CONCLUSION AND ASSESSMENT

Use the flashcards to test if the children can name rectangles and circles.

Ask children to draw rectangles and circles.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 6 WEDNESDAY **PLANE SHAPES**

LESSON TOPIC: Plane Shapes

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Pick out a triangle from other shapes and identify objects that are similar to triangles inside and outside the classroom.

2 STARTER

Show the children 10 objects that have circles and rectangles in them (e.g. book, bottle, mug, biscuit box, etc). Ask children to call out 'rectangle' or 'circle' when you hold up the object. Ask them to work with a friend to name at least 5 other objects that have circles or rectangles in them.

3 INTRODUCTION

Teach the word 'triangle'. Explain that it is a flat object with 3 sides. Explain that the sides can be different lengths. Explain that they can sometimes be seen in traditional patterns and show an example if you have one.

Show flashcards with different shapes and sizes of triangles. Ask what the differences are between triangles, rectangles and circles.

4 TEACHER AND STUDENT ACTIVITY

Ask children to walk around the classroom and school to find objects that are triangles, rectangles, circles or another shape.

Together, draw the objects on the board in a table, e.g.

			
roof support	text book	water tank	chair

5 CONCLUSION AND ASSESSMENT

Use the flashcards to assess if children can identify the 3 different shapes.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 6 THURSDAY **PLANE SHAPES**

LESSON TOPIC: Plane Shapes

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Group similar shapes together and name them.

2 STARTER

Make a pattern of shapes on the board and ask the children to describe the pattern using the words ‘circle’, ‘rectangle’ and ‘triangle’.

Ask them to draw a pattern for a friend to describe.

3 INTRODUCTION

Put the children into groups of 4 and give each group a collection of objects and cut-out shapes. Ask them to sort them into triangles, rectangles and circles.

Ask them how they know what kind of shape it is. Ask if they have found any other shapes. Ask them to find the largest rectangle/ circle/triangle. Ask them to find the smallest rectangle/circle/triangle.

4 TEACHER AND STUDENT ACTIVITY

Take the children for a walk outside the classroom, telling them to look for things that are a circle, things that have 4 sides and things that have 3 sides.

Take the children back to the classroom and make a table on the board of things they have found that have 4 sides, 3 sides or are a circle, e.g.

4	3	○

5 CONCLUSION AND ASSESSMENT

Ask children to draw 5 different circles, triangles and rectangles in their books.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow’s lesson.

TERM 2 WEEK 6 FRIDAY **PLANE SHAPES**

LESSON TOPIC: Plane Shapes

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Draw, cut out and match triangles, rectangles and circles.

2 STARTER

Make a pattern on the board that uses different numbers of triangles, rectangles and circles. Ask the children to continue the pattern on their chalkboards or in their books.

Tell the children a pattern of shapes and ask them to draw it for a friend.

Ask them to design their own pattern of triangles, rectangles and circles and give it to a friend to continue the pattern.

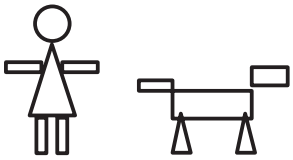
3 INTRODUCTION

Get the children to cut out a page of different-sized triangles, rectangles and circles. Get them to name and sort them.

4 TEACHER AND STUDENT ACTIVITY

Divide students into pairs and give each some cut-out shapes.

Tell them to make pictures with the shapes, e.g.



Ask the children to make a person with triangles, rectangles and circles and to make a house, a boat and a tree. Ask what else they could make.

Share the best ones with the whole class and ask the children to name the shapes they used [e.g. 'I used 3 circles'].

5 CONCLUSION AND ASSESSMENT

Test the children's knowledge of the 3 shapes by asking them to give 3 examples of objects they know with each shape. Assess if they can point to the shape in a collection. See if they can sketch it and describe the number of sides it has. See if they can find a shape that is not a circle, rectangle or triangle.

Make a note of those children who are not able to do this and those finding it too easy. Write this information in the class assessment folders.

TERM 2 WEEK 7 MONDAY **SOLIDS**

LESSON TOPIC: Solid

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

Note: The above information is for the whole of week 7 Term 2

1 OBJECTIVE

Pick out a cylinder-shaped object from other solid objects and identify objects that are similar to a cylinder.

2 STARTER

Revise rectangles, circles and triangles. Ask the children how the shapes are the same. Ask them how they are different.

Ask the children to name objects that they know that are rectangles, circles and triangles.

Play 'I spy', e.g. 'I spy with my little eye something that has four sides.'

3 INTRODUCTION

Teach the word 'cylinder'. Explain that it is a solid shape with a circle at each end. Show the children a collection of cylinder shapes, e.g. cans, buckets, tubes, pipes. Ask the children if they can they see the circle shape at each end of the cylinder.

Tell the children to say the word 'cylinder' and to draw a cylinder in the air.

Tell them to say the word 'cylinder' and to draw a cylinder on a friend's back.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and ask them to find objects that are like cylinders in the classroom or school. Draw the objects on the board.

Ask the children if the objects can roll or slide. Ask if they have a circle at each end. Ask if they are hollow or solid. Ask if they have any straight lines.

5 CONCLUSION AND ASSESSMENT

Make a collection of solid shapes and objects and ask children to come up one at a time and choose a cylinder.

Tell a story, e.g. 'I go to the garden/store/river/sea/mountain/town/road/sports field', etc. Ask the children what things you see there that are cylinders.

TERM 2 WEEK 7 TUESDAY **SOLIDS**

LESSON TOPIC: Solid

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Pick out a cone-shaped object from other solid objects and identify objects that are similar to a cone.

2 STARTER

Play 'What's In the bilum?'. Include objects that are rectangles, circles and cylinders.

3 INTRODUCTION

Revise cylinders. Ask children to list objects that are like cylinders. Ask them what shape is found at the end of a cylinder.

Teach cones. Show the children some paper cones of different sizes. Ask the children how the cones are different to cylinders. Ask them what shape they can see in a cone.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to make cones from scrap paper. Ask them to make the biggest cone that they can and the smallest cone that they can.

Ask the children to name objects that look like cones; e.g. shells, ice-cream cones, traffic cones.

5 CONCLUSION AND ASSESSMENT

Ask the children to pick out cones and cylinders from a box of shapes and from flashcards that include drawings of cones.

Ask the children which are cones and which are cylinders. Ask the children how the cones and cylinders are the same. Ask them how they are different.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 7 WEDNESDAY **SOLIDS**

LESSON TOPIC: Solid

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Pick out a cube-shaped object from other solid objects and identify objects that are similar to a cube.

2 STARTER

Use flashcards to test the children's knowledge of flat shapes (circles, triangles, rectangles) and solid shapes (cones, cylinders).

For each flashcard ask the children to name real objects that look like that shape, e.g. the sun, a book.

3 INTRODUCTION

Teach the children that cubes have 6 flat faces which are rectangles.

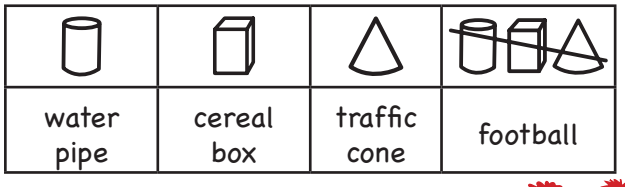
Show the children different sizes of cubes and boxes. Ask the children to count the number of faces out loud [6].

Ask the children to count the number of edges [12]. Ask them to count the number of corners [8].

4 TEACHER AND STUDENT ACTIVITY

Send the children on a cube hunt for boxes, blocks of wood, books, etc.

Ask them to count how many different objects that look like cubes they find. Draw the objects on the board in a table with the cones and cylinders from the previous two lessons, e.g.



5 CONCLUSION AND ASSESSMENT

Ask the children to sort a set of flashcards with drawings of cones, cylinders and cubes into groups.

Ask the children how many edges the objects have. Ask them how many corners they have. Ask them how many faces they have.

Ask the children if any objects are not cubes, cylinders or cones.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 2 WEEK 7 THURSDAY **SOLIDS**

LESSON TOPIC: Solid

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Pick out a sphere-shaped object from other solid objects and identify objects that are similar to a sphere.

2 STARTER

Ask the children to draw different flat and solid shapes in the air and on the back of a friend, e.g. circle, rectangle, triangle, cone, cylinder, cube.

Ask the children if they can name objects which have those shapes.

3 INTRODUCTION

Teach the children that a sphere is a ball with just one face and no edges or corners and that spheres roll.

Show real balls of different sizes and let the children handle and describe them.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to collect different balls, e.g. fruit, stone, football, marble.

Make a collection of lots of different solid shapes and of flashcards of real objects which look like cylinders, cones, cubes and spheres. Ask children to come up one at a time to select one shape and name it and add it to a sorting circle.

5 CONCLUSION AND ASSESSMENT

Play 'What's in the bilum?' with different solid shapes with the whole class. Teach the children to ask each other questions, e.g. how many faces does it have?

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

Ask the children to bring in at least 3 solid objects from home for sorting tomorrow.

TERM 2 WEEK 7 FRIDAY **SOLIDS**

LESSON TOPIC: Solid

STRAND: Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Group similar solid items together and name them.

2 STARTER

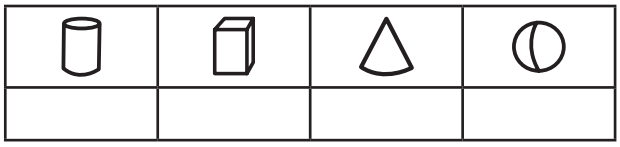
Put out the objects that the children have brought in from home, e.g. chalk box, chalk stick, matchbox, tin can, marble, block, cereal packet, toilet roll.

Hold up one object at a time and ask what kind of solid shape it is. Ask how many faces, edges and corners it has.

3 INTRODUCTION

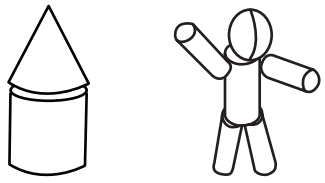
Revise the new solid shapes: cylinder, cone, cube, sphere. Ask the children to draw them on the back of a friend or on paper.

Ask the children to find an object in the classroom that looks like one of the shapes. Draw the objects on the board in a table, e.g.



4 TEACHER AND STUDENT ACTIVITY

Make models using different shapes. Ask the children to use scrap paper and glue and work in pairs to make a toy using more than one solid shape, e.g.



Display the best models and ask the children to name the solid shapes in them.

Ask the children if they can find any solid shapes that are not cubes, cylinders, cones or spheres. Ask them to describe the objects.

5 CONCLUSION AND ASSESSMENT

Play the 'Relay' game. Put the children into groups of 4. Put objects in front of each group.

Pick a first child in each group. Ask those children to run and pick up an object when you call out the name, e.g. 'cylinder!'. Each group gets a point if the child gets the correct object. Repeat with the other 3 children in each group. The team with the most points wins the game.

Test whether the children can name and draw the 4 solid shapes. Test whether they can name a real object that is like each shape.

TERM 2 WEEK 8 MONDAY **WEIGHT**

1 OBJECTIVE

Compare the weight of objects by hand, using the words ‘lighter’ and ‘heavier’.

2 STARTER

Sing a number song, preferably one with actions.

3 INTRODUCTION

Introduce the words ‘heavier’ and ‘lighter’. Explain that heavy things pull down more than lighter things. Show the children objects of the same type but different size, e.g. books, and ask them to guess which of them is heavier and which is lighter.

Not Standard for this week’s lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Tell the children to pair up and go out of the classroom to collect some objects of the same type but different size, e.g. stones, and bring them into the classroom.

Tell the pairs to take turns holding their objects, one in each hand, and try to feel which is heavier and which is lighter. Make sure they both agree. Show them left and right. Ask them to put the lightest on the left and the heaviest on the right.

Ask pairs to compare their objects and tell the other pair which object is heavier and which is lighter. See if they disagree. Help if there are differences.

5 CONCLUSION AND ASSESSMENT

Ask some children to share which objects are heavier and lighter with the whole class.

Note which children could not identify the heaviest object and remember it when planning your lesson for tomorrow.

TERM 2 WEEK 8 TUESDAY **WEIGHT**

1 OBJECTIVE

Compare the weight of 3 objects and order from lightest to heaviest.

2 STARTER

Bring in a selection of objects, e.g. stones, sticks, leaves, fruit. Ask how many there are of each type and how many altogether.

3 INTRODUCTION

Tell a short story about who checks weights in the village. Introduce the words 'heavy', 'heavier', 'heaviest' and 'light', 'lighter', 'lightest'. Be clear about the differences, using 3 objects to demonstrate.

Not Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Ask pairs of children to get any 3 different objects from the selection in the starter and feel and describe them. Ask the children to hold one object at a time and order them, from the lightest to the heaviest. Ask them to put the lightest at the left and the heaviest at the right, in a line.

Ask the children to tell another pair about their objects. Make sure they agree.

Ask some pairs to tell the class about their comparison from lightest to heaviest. Check the pairs and see if they got it right.

5 CONCLUSION AND ASSESSMENT

Assess if the children can confidently show you their 3 objects and describe the objects using the vocabulary of weight (lightest, heavier, heaviest). Ask pairs to hold up their heaviest object. Ask them to hold up a lighter object. Ask them to hold up the lightest object.

Check and note any children who are not able to do this. Use this information to help plan tomorrow's lesson.

TERM 2 WEEK 8 WEDNESDAY **WEIGHT**

1 OBJECTIVE

Compare the weight of 5 objects and order from lightest to heaviest.

2 STARTER

Count from 0 to 20 in the children's home language.

3 INTRODUCTION

Remind children of the words 'heavy', 'heavier', 'heaviest' and 'light', 'lighter', 'lightest'. Be clear about the differences, use 5 objects to demonstrate meaning. Make several comparisons. Ask which object is heaviest and which are lighter.

Not Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Ask children, in pairs, to go out of the classroom and collect 5 different objects and bring them inside, e.g. sticks, stones, leaves, bags, books.

Tell the children to feel the weight of each object and compare it with the other objects. Ask the children to order the objects from lightest to heaviest. Remind them of left and right. Ask them to put the object in a line; the lightest at the left and the heaviest at the right.

Ask the children to tell another pair about their objects. Make sure they agree.

Ask some pairs to tell the class about their comparison from lightest to heaviest. Check the pairs and see if they got it right.

5 CONCLUSION AND ASSESSMENT

Assess if the children can confidently show you their 5 objects and describe the objects using the vocabulary of weight (lightest, heavier, heaviest). Ask pairs to hold up their heaviest object. Ask them to hold up a lighter object. Ask them to hold up the lightest object.

Get the class to ask some pairs questions, such as which of your objects is heaviest?

Check and note any children who are not able to ask or answer questions properly. Use this information to help plan tomorrow's lesson.

TERM 2 WEEK 8 THURSDAY **WEIGHT**

1 OBJECTIVE

Compare and order the weight of common foods, e.g. kaukau, coconuts, bananas.

Not Standard for this week's lessons.

Optional

2 STARTER

Sing the song of the 3 food groups in the children's local language.

3 INTRODUCTION

Tell the children what you ate for breakfast. Ask some children what they ate for breakfast before coming to school. Tell them today's lesson is about food.

4 TEACHER AND STUDENT ACTIVITY

Show children a varied group of foods that are found in their community.

Put children into pairs and give each pair 5 different samples of the foods. If a pair from yesterday found it difficult, just give them 3 samples. Tell them not to eat the food yet, but that if they do well they might get some to eat at the end of the lesson.

Ask the pairs to feel the weights of the food items and order the foods from the lightest to the heaviest with the lightest on the left and the heaviest on the right.

Ask the children to tell another pair about the weight of their foods. Make sure they agree.

Ask some pairs to tell the class about their comparison from lightest to heaviest. Check the pairs and see if they got it right.

5 CONCLUSION AND ASSESSMENT

Ask the children to show you their ordered objects and use the words 'heavier', 'heaviest', 'lighter', 'lightest'. Get the class to ask some pairs questions, such as which of their foods is heaviest.

Check and note any children who are not able to ask or answer questions properly. Use this information to help plan tomorrow's lesson.

1 OBJECTIVE

Compare the size of large objects the children know, e.g. bicycles, cars, trucks, and order them from lightest to heaviest.

2 STARTER

Ask the children to count on their fingers from 0 to 20. Count with objects up to 20 or sing a counting song up to 20.

3 INTRODUCTION

Show the children simple pictures of objects they know, e.g. PMV, pig, house, chicken, banana, and ask them to name the objects in their home language.


PMV


house


banana


pig


chicken

Introduce the words ‘big’, ‘bigger’, ‘biggest’ and ‘small’, ‘smaller’, ‘smallest’.

Not Standard for this week’s lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Put the pictures of the objects on the board and ask the children to compare the sizes of each object. Ask questions about the size of each object, such as ‘Which is the biggest?’ or ‘What is smaller than a pig?’.

Ask children to compare and order the pictures from the lightest to the heaviest. Get the children to work by themselves and draw the objects in order of weight. Move around assisting and supervising children.

5 CONCLUSION AND ASSESSMENT

Ask the children to share their answers with the class. Discuss any differences and why they came up, e.g. a small house might be lighter than a PMV, but a big house would be heavier.

Take note of any children who could not put the objects in any kind of sensible order and note it in your class assessment folders.

TERM 2 WEEK 9 MONDAY **LENGTH**

LESSON TOPIC: Length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

Note: The above information is for the whole of week 9 Term 2

1 OBJECTIVE

Measure the length of classroom furniture using the number of hand spans.

2 STARTER

Sing a counting song to 20.

3 INTRODUCTION

Demonstrate to the children using the board or any other object in the classroom how to measure length using hand spans [from the tip of the little finger to the tip of the thumb, hand spread out wide], counting as you go.

Ask the children to measure the length of their exercise book and desk using their hand span.

4 TEACHER AND STUDENT ACTIVITY

In pairs, get the children to take turns to measure classroom furniture, e.g. height of chair, width of desk, using their hand span. Ask the first child to measure with their hand span while the second child counts the number of hand spans, then swap.

Get them to compare their number of hand spans with their partner.

5 CONCLUSION AND ASSESSMENT

Draw a table on the board including the children's names. Ask the children for their number of hand spans and record them against the number of furniture.

Note any children who had trouble counting and remembering and use this information to help plan your lesson for tomorrow.

TERM 2 WEEK 9 TUESDAY **LENGTH**

LESSON TOPIC: Length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Measure the height of children using a piece of stick, rope or string.

2 STARTER

Ask the children to stand together in pairs and compare their heights. Introduce the words 'tall', 'taller', 'tallest' and 'short', 'shorter', 'shortest'.

3 INTRODUCTION

Talk about the difference between height and length.

Stand against the board or wall and mark off your height. Show how you measure your own height using a stick, counting as you go. Record your height in sticks on the board.

4 TEACHER AND STUDENT ACTIVITY

Write the children's names on the board. Put the children in pairs. Give each pair a piece of stick, rope or string, all of the same length (about 7cm).

Ask the pairs to measure each other's height and to give you their answers to write on the board.

Keep a record of the heights to use in Term 4 Week 5.

5 CONCLUSION AND ASSESSMENT

Using the numbers on the board, get the children to line up in order. Check that they are in the correct height order. If not, check any that are wrong, getting the class to count along.

Note any mistakes and the children who made them. Use this information to help plan your next lesson.

TERM 2 WEEK 9 WEDNESDAY **LENGTH**

LESSON TOPIC: Length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Measure the length of the classroom using arm lengths, steps and sticks/rope/string.

2 STARTER

Using the board or any object in the classroom, show the children how to measure length using arm lengths, steps and sticks/rope/string (about 70cm long).

3 INTRODUCTION

Talk about ways to measure the length of different things. Remind them that yesterday we looked at heights and used little sticks/string/rope. Explain that today we will measure something bigger, so we will use a bigger measurement.

Using the board or any object in the classroom, show the children how to measure length using arm lengths, steps and sticks/rope/string (about 70cm long).

4 TEACHER AND STUDENT ACTIVITY

Draw up a table for the length of the classroom using arm lengths, steps and sticks/rope/string.

Put the children in pairs. Each pair measures the length of the classroom using arm lengths, steps and sticks/rope/string and you record the results on the board.

5 CONCLUSION AND ASSESSMENT

Ask children which is the quickest or best method (using arm lengths, steps, sticks/rope/string) to measure the length of the classroom and why. Check the different pairs' answers and see if any are clearly wrong.

Ask to see one group check their answer with the class watching and counting along. Discuss if their method was good and if it could be made better.

Note which children could not measure the length and use this information to help you plan your next lesson.

TERM 2 WEEK 9 THURSDAY **LENGTH**

LESSON TOPIC: Length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Measure the length and height of different things using sticks, rope or string.

2 STARTER

Sing a counting song up to 20.

3 INTRODUCTION

Talk about some ways to measure the length of different things. Remind children, using the board or any object in the classroom, how to measure length using pieces of stick, rope or string (all about 7cm long).

4 TEACHER AND STUDENT ACTIVITY

Ask children what things they can see in the classroom. Tell them that these are the things they will be measuring. Draw up a table for the different objects in the classroom.

Put children in pairs and let them measure objects in the classroom using the sticks, rope or string. Record their results on the board.

5 CONCLUSION AND ASSESSMENT

Discuss any results that are surprising. Ask some of the children to check some of their answers with the class watching and counting along. Discuss if their method was good and if it could be made better.

Note any children who cannot measure well and use this information when planning your next lesson.

TERM 2 WEEK 9 FRIDAY **LENGTH**

LESSON TOPIC: Length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Measure different things around school and record using appropriate informal measurement.

2 STARTER

Take the children outside and line them up. Stand them about 10m away from the classroom wall. Ask them how many steps away they think the classroom is. After hearing some guesses, get them all to check by walking in a line forwards, counting steps as they go.

3 INTRODUCTION

Discuss with the children appropriate ways (hand span, arm lengths, steps, sticks/rope/string) to measure the height and length of different things depending on how tall or short, wide or narrow the object is. Say that today you want them to measure big things, using steps. Ask them to suggest what sort of things they might be measuring.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Get each group to measure the length and/or width of the playing field using steps and record their results.

5 CONCLUSION AND ASSESSMENT

Ask each group how many steps they took for the length/width of the playing field. Check that all the answers are about the same. Ask if there was anything difficult about doing it; whether anyone lost count or got their numbers mixed up. Reassure them if they did.

Try to get a good answer for the length/width. Check it with the class watching and counting as one group.

Record any children who could not measure or count accurately in your class assessment folders.

TERM 3 WEEK 2 MONDAY **COUNTING**

1 OBJECTIVE

Count objects from 0 to 20 and count backwards from 20 to 0 in the language that the child knows best and in English.

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

Note: The above information is for the whole of week 2 Term 3

2 STARTER

Play 'I say, you say'. The rule is 2 more, e.g. 'I say 2, you say 4'. Repeat for all numbers from 2 to 18.

3 INTRODUCTION

Show the children how to use their fingers and toes to count from 0 to 20 and backwards from 20 to 0.

4 TEACHER AND STUDENT ACTIVITY

Take the children outside.

Ask the children to jump as many times as the number that you call out and to count as they jump. Repeat for other numbers from 0 to 20.

Pick 21 children and give each child a flashcard with a number from 0 to 20. Ask them to line up in the correct order from 0 to 20. Pick different children and give each child a flashcard. Ask them to line up in the correct order from 20 to 0.

Ask the children to take as many steps as the number that you call out and to count as they walk. Now, ask them to turn around and walk back and to count their steps backwards.

5 CONCLUSION AND ASSESSMENT

Show the children a number flashcard and ask them to say the number. Repeat with all numbers from 0 to-20. Together, count from 0 to 20 in English.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 2 TUESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Say numbers from 0 to 20 in the language the child knows best and match them with English words for 0 to 20.

2 STARTER

Peg flashcards from 0 to 20 on to a washing line. Together, count from 0 to 20 and backwards from 20 to 0.

Ask the children to close their eyes. Remove one of the cards and ask the children to say which number has been removed. Repeat, removing different numbers.

3 INTRODUCTION

Revise words for 0 to 15 in English. Introduce the English words for the numbers from 16 to 20.

Show the children how to count from 0 to 20 in the language they know best, using fingers and toes. Repeat in English.

4 TEACHER AND STUDENT ACTIVITY

Clap your hands 15 times and ask the children to listen and tell you in English how many times you clapped. Repeat with different numbers from 0 to 20.

Put children into pairs and give each pair a pile of objects. Ask them to count out 20 objects and put them in a row. Get them to practise counting from 0 to 20 and backwards from 20 to 0 in English, using the objects.

5 CONCLUSION AND ASSESSMENT

Show a flashcard for 16. Ask the children the number in English and in the children's own language. Repeat with different flashcards.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 2 WEDNESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Translate the numbers from 0 to 20 into English and count objects from 0 to 20 forwards and backwards in both the language the child knows best and English.

2 STARTER

Count around the class from 0 to 20 and from 20 to 0, by asking the first child to say 0, the second 1 and so on, up to 20. Then count backwards in the same way. Repeat the activity slowly. Repeat the activity quickly.

3 INTRODUCTION

Together, count from 0 to 20 and from 20 to 0 in English. Show a flashcard for 10 and ask the children to say the number in English. Repeat using different numbers

4 TEACHER AND STUDENT ACTIVITY

Clap your hands 15 times and ask the children to listen and tell you in English how many times you clapped. Repeat with different numbers from 0 to 20.

Put children into pairs and take them outside. Ask them to collect 20 small objects, e.g. stones, sticks, shells, leaves, seeds. Take them back inside and ask them to draw their objects.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show their picture and to count their objects in English. See if the class agrees. Ask another pair. Altogether, count from 0 to 20 and backwards from 20 to 0 in English.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 2 THURSDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count from 0 to 20 in different sets of objects in both the language the child knows best and English.

2 STARTER

Sing '10 ripe pawpaws' and '10 in the bed'.

3 INTRODUCTION

Together, count from 0 to 20 and from 20 to 0 in the language the children know best and in English. Show a flashcard for 10 and ask the children to say the number in English. Repeat using different numbers

4 TEACHER AND STUDENT ACTIVITY

Put children into pairs. Give each pair a string and some beads or some other objects that they can thread. Ask them to make a string with 10 beads and another one with 20 beads. Tell them to use these strings to practise counting.

Together, count from 0 to 20 and backwards from 20 to 0. Ask the children to stamp their feet the same number of times as each number.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show their strings and count their beads in English. Ask the class if it agrees. Ask another pair. Altogether, count from 0 to 20 and backwards from 20 to 0 in English.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 2 FRIDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count from 0 to 20 and backwards from 20 to 0 in both the language the child knows best and English.

2 STARTER

Together, count from 0 to 20 in English and backwards from 20 to 0 in the language the children know best. Now count from 0 to 20 in the children's language and backwards from 20 to 0 in English. Repeat this activity slowly and then quickly.

3 INTRODUCTION

Hold up a number flashcard and ask the class to tell you the number in English and in their language. Repeat for all numbers from 0 to 20.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give each child a number flashcard and ask them to draw a circle with that number of dots in it.

Ask each pair to put their circles together and to tell each other which circle has more dots and which has less. Repeat this with 2 more flashcards.

5 CONCLUSION AND ASSESSMENT

Ask one pair to show their drawings and to say which circle has more and which has less. Ask the class if it agrees. Repeat this activity with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Write this information down in the class assessment folders.

TERM 3 WEEK 3 MONDAY **ADDITION**

LESSON TOPIC: Addition

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

Note: The above information is for the whole of week 3 Term 3

1 OBJECTIVE

Work out simple oral addition problems from maths stories using 1 to 10.

2 STARTER

Sing 'On my way to school today I met a little friend'.

3 INTRODUCTION

Show how to work out simple oral addition problems from maths stories, e.g. Kila went to the store to buy a biscuit and a drink. How many things did she buy? Tell the children you will say the story again and ask them to put up 1 finger every time they hear something she bought. How many fingers have they put up?

4 TEACHER AND STUDENT ACTIVITY

Tell other stories:

Boga had two mangoes (hold up 2 fingers) and Tau had three mangoes (hold up 3 fingers). How many mangoes do they have altogether? Ask the children how to find the answer. Count the fingers together to get the answer 5.

Philip went to the market and bought 2 paw paw (hold up 2 fingers), 3 cucumbers (hold up 3 more fingers) and 1 sugar cane (hold up 1 more finger). How many things did he buy altogether? Count the fingers together to get the answer 6.

Put children into pairs and ask them to make up their own story and to work out the answer.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell their story. See if the class can work out the answer. Repeat this activity with a different pair.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 3 TUESDAY **ADDITION**

LESSON TOPIC: Addition

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

1 OBJECTIVE

Solve simple picture addition problems from stories using 1 to 10.

2 STARTER

Chant '1, 2, 3, 4, 5 hurray, hurray, hurray! 6, 7, 8, 9, 10 hurray, hurray, hurray'.

3 INTRODUCTION

Show children cards with pictures of fruit and vegetables from 1 to 10, e.g. 3 kaukaus, 5 bananas. Tell them that they can use these cards to help them count. Say Pala went to market and bought 3 kaukaus and 5 bananas. How many things did she buy? To find the answer count the fruit on the cards. 5 add 3 equals 8.

Make up a different story with different numbers.

4 TEACHER AND STUDENT ACTIVITY

Hang the picture cards on the washing line so everyone can see them. Ask the children to make up a story using these picture cards and to work out the answer. Ask them to make up another story and work out the answer.

Move around the class listening to the children. Give help to those who need it. If children are finding it easy, give them bigger numbers.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell their story. See if the class can work out the answer. Repeat this activity with a different pair.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 3 WEDNESDAY **SUBSTRACTION**

LESSON TOPIC: Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.6

1 OBJECTIVE

Work out simple oral subtraction problems from stories using 1 to 10.

2 STARTER

Sing '10 ripe pawpaws' and '10 in the bed'.

3 INTRODUCTION

Say the word 'subtract'. Ask the children to say it. Tell them it means to take away.

Show children how to use their fingers to subtract, e.g. I have 3 mangoes (everybody shows 3 fingers) and I eat 2 (everybody puts 2 fingers down). How many do I have left? The answer is 1. Ask the children why you put 2 fingers down. Repeat this activity with different numbers.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Ask them to make up their own number stories:

- Make a story from 5 kaukaus and tell how many are left.
- Make a story from 6 ripe bananas and tell how many are left.
- Make a story from 7 mangoes and tell how many are left.
- Make a story from 6 pencils and tell how many are left.
- Make a story from 8 guavas and tell how many left.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell their story. See if the class can work out the answer. Repeat this activity with a different pair.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 3 THURSDAY **SUBSTRATION**

LESSON TOPIC: Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.6

1 OBJECTIVE

Solve simple picture subtraction problems from stories using 1 to 10.

2 STARTER

Sing 'I little, 2 little, 3 little fingers' and '5 little piggies'.

3 INTRODUCTION

Show the children how to use picture cards to solve subtraction problems 1 to 10. Tell a story, e.g. I bought 5 bananas but two were bad. How many good bananas did I have? Show a picture with 5 bananas and cross out 2 bananas. Count together how many are left.

Repeat with different pictures and different numbers.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Ask them to make up their own number stories and draw pictures to work out the answers:

- Make a story from 3 kaukaus and tell how many are left.
- Make a story from 7 ripe bananas and tell how many are left.
- Make a story from 10 mangoes and tell how many are left.
- Make a story from 6 pencils and tell how many are left.
- Make a story from 9 guavas and tell how many left.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell their story and show their pictures. Ask if the class agrees with the answer. Repeat this activity with a different pair.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 3 WEEK 3 FRIDAY **ADDITION & SUBSTRATION**

LESSON TOPIC: Addition and Subtraction

STRAND: Number and Operation

CONTENT STANDARD: P.1.5, P.1.6

1 OBJECTIVE

Make up simple addition and subtraction problems for friends using 1 to 10.

2 STARTER

Sing 'I little, 2 little, 3 little fingers' and '5 little piggies'.

3 INTRODUCTION

Remind the class that subtract means to take away.

Tell simple addition and subtraction problems, e.g. 'There are two boys in the group and two girls joined the group. How many in the group now?' Ask the children if you add or subtract to find the answer. Show them how to use fingers to help.

Repeat with a subtraction story, e.g 'I bought 10 cakes but a mouse ate 2 of them. How many were left?'

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Ask one child to make up a number story and the other child to work out the answer. Tell the children to take turns to do this. Tell them that they can use drawings or fingers to help them.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell their story and how they worked out the answer. See if the class agrees with the way they did it and their answer. Repeat this activity with different pairs.

Make a note of those children who are not able to do this and those finding it too easy. Write this information in the class assessment folders.

TERM 3 WEEK 4 MONDAY **WEIGTH**

1 OBJECTIVE

Estimate the weight of an object using non-standard units.

2 STARTER

Sing a number song and ask the children to count using fingers.

3 INTRODUCTION

Show the children some of the objects that you have collected from daily life.

No Content Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and take them out of the classroom. Ask them to collect objects of different sizes and to take them back into the classroom.

Ask the children to hold the heaviest object in one hand and to feel how heavy it is.

Ask the children to hold other, lighter objects and to estimate how many of them will weigh as much as the heaviest one, e.g. a big stone = 8 sticks.

Walk around the classroom, listening to the children's answers.

5 CONCLUSION AND ASSESSMENT

Ask the children to share their answers with the class and discuss a few of the answers.

Take note of any children who could not identify the heaviest object or give a reasonable answer to the questions. Use this information to help plan your next lesson.

TERM 3 WEEK 4 TUESDAY **WEIGTH**

1 OBJECTIVE

Find objects that weigh the same as e.g. 5 stones.

No Content Standard for this week's lessons.

Optional

2 STARTER

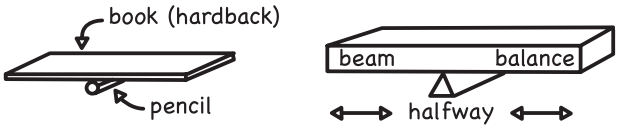
Ask the children to sing a number song.

Ask the children to count from 1 to 20 using their fingers and backwards from 20 to 1.

3 INTRODUCTION

Tell a story about the scale that weighs babies in hospitals. Ask the children why we weigh babies. Tell them that it is to check that the babies are the right size and that they are healthy. Tell the children that they are going to look at weight and to compare weights. Introduce the words lighter, heavier, equal.

Show the children a beam balance. Show them how one end goes down when heavy things are placed onto that end. Show them how the other end goes up. Show them that when more weight is put onto the other end, it goes down and the first end goes up.



4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give each pair a beam balance and a lot of stones or other objects of different sizes. Ask the children to find stones which will balance the beam, to make it lie flat in the air. Walk around the classroom and help the children.

Ask the children how many objects balance the heaviest objects on the beam balances.

5 CONCLUSION AND ASSESSMENT

Ask each pair of children to check their answer, with the rest of the class counting the objects in the balance. Ask the children how they know that one side is heavier than the other. Ask them what happens when they put something heavy on one side of the balance.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson. For example, if a pair were not able to use their balance, split the pair up and put them with children who could use the balance properly.

TERM 3 WEEK 4 WEDNESDAY **WEIGTH**

1 OBJECTIVE

Find pairs of objects that weigh the same, using a beam balance.

No Content Standard for this week's lessons.

Optional

2 STARTER

Ask the children to count from 0 to 20 in the language they know best and to count backwards from 20 to 0.

3 INTRODUCTION

Tell the children that they are going to look at weight and to compare weight. Put the children into pairs. Take the children outside the classroom and tell them to collect different objects that weigh the same and to take them inside the classroom.

4 TEACHER AND STUDENT ACTIVITY

Give each pair of children a beam balance. Tell them to put an object on to the beam balance and find other objects from their collection that can balance it out.

Walk around the classroom and help the children.

Show the class how different pairs have found objects which balance. Ask them to say how they judged the weight before balancing. Ask them if they were surprised. Ask them if they found it easy.

5 CONCLUSION AND ASSESSMENT

Ask the pairs to look at other pairs' balanced objects on the beam balances.

Tell them to give themselves a big clap.

Ask some pairs to describe what they did today and how they know that two objects weigh the same.

Note which pairs were able to use the balance well and to find objects of equal weight. Use this information to help you plan your lesson for tomorrow.

TERM 3 WEEK 4 THURSDAY **WEIGTH**

1 OBJECTIVE

Estimate the weight of and weigh fruit and vegetables, using non-standard units.

No Content Standard for this week's lessons.

Optional

2 STARTER

Sing a maths song.

Ask the children to count up to 20 and back down.

3 INTRODUCTION

Tell the children what you had for breakfast. Ask some children about what they ate for breakfast before coming to school. Ask whether any of them ate fruit or vegetables.

4 TEACHER AND STUDENT ACTIVITY

Show the children some fruit and vegetables that are found in their community.

Put the children into pairs and share some fruit and vegetables with each pair. Give each pair a beam balance. Ask the children to estimate the weight of, to weigh and to compare the fruit and vegetables, using their hands or the beam balance. Walk around and help the children.

Ask some questions about their results, e.g. 'which fruit is heavy and which is light?'

5 CONCLUSION AND ASSESSMENT

Ask the children to put the fruit in order on a desk at the front of the room, the lightest on the left, the heaviest on the right. Help the children to agree on the correct order. Share out some fruit and let the children eat it.

Note which pairs did not manage to use the beam balances correctly or were not able to tell which object was the heaviest. Use this information to help you plan tomorrow's lesson.

TERM 3 WEEK 4 FRIDAY **WEIGTH**

1 OBJECTIVE

Estimate the weight of objects and order objects according to their weight.

No Content Standard for this week's lessons.

Optional

2 STARTER

Ask the children to count on their fingers from 1 to 20.

Ask them to count from 1 to 20 using objects.

3 INTRODUCTION

Tell the children that they are going to look at weight today. Ask them if they remember what they did in yesterday's lesson. Ask them how they compared weights.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Take them outside and ask them to collect 5 different objects of different weights. Take the children back inside and give each pair a beam balance.

Ask the children to compare the weights of their objects with their hands or the beam balances. Walk around and help the children.

Ask the children to put the objects in order, the lightest on the left, the heaviest on the right. Ask each pair to check another pair's answers. Make sure that they agree.

5 CONCLUSION AND ASSESSMENT

Ask a pair to show the order of their objects to the rest of the class. Ask the class if it agrees with the order. Discuss with the children what they did today.

If any pair makes mistakes, record it in the class assessment folders.

TERM 3 WEEK 5 MONDAY **CAPACITY**

1 OBJECTIVE

Say which containers are full and which are empty.

2 STARTER

Ask the children to count from 1 to 20 and backwards from 20 to 1.

Sing a number song.

3 INTRODUCTION

Show children several different containers and ask what they are used for.

No Content Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Fill some containers with water and leave others empty.

Ask the children to describe what they have seen. Ask the children to say 'empty' for those containers that have no water in them and 'full' for those that have water in them.

Ask children to come to the front, hold a container up and say whether it is empty or full.

Ask several children to stand and to close their eyes. Give them a container each and ask them if they think it is empty or full. Ask them what they did to tell, if they did not open their eyes.

5 CONCLUSION AND ASSESSMENT

Ask the class to point to the right containers when you say 'empty' or 'full'. Note which children point correctly and which make mistakes. Use this information to plan tomorrow's lesson.

Summarise the whole lesson.

Tell the children to bring different types of containers tomorrow.

TERM 3 WEEK 5 TUESDAY **CAPACITY**

1 OBJECTIVE

Measure the capacity of different containers and put them in order from smallest to biggest.

No Content Standard for this week's lessons.

Optional

2 STARTER

Ask some quick-fire questions, e.g. 'what is the number after 7?' or 'what comes next, after 3, 4, 5 …?'

3 INTRODUCTION

Tell a short story about the Coca-Cola factory that stored Coke in containers. Tell them that the factory had huge containers which had enough space for many, many bottles of Coca-Cola. Tell them that they are going to look at how big their containers are.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to take out the containers that they brought. Put the children's names on their containers.

Put the children into pairs so that each pair has at least 3 containers. Give each group a measuring cylinder or small water holder. Take the class outside, as water will get spilled. Have several big buckets of water ready for the children to use.

Show the children how to fill a container with water, using a measuring cylinder and counting each time they pour the water in. Tell the pairs to fill their containers with their measuring cylinder and count how many times they have poured.

Ask the children to put their containers in order, the smallest on the left, the biggest on the right.

5 CONCLUSION AND ASSESSMENT

Check the order of a pair, getting the class to watch and count as you fill the containers. Ask them how they know that one container is bigger than another.

Note which pairs could not pour water into the containers correctly, or lost count often. Use this information to plan your next lesson. Keep the containers for tomorrow.

TERM 3 WEEK 5 WEDNESDAY **CAPACITY**

1 OBJECTIVE

Measure the capacity of different containers and put them in order from biggest to smallest.

2 STARTER

Count from 0-20 in their home language.

Chant number rhymes.

3 INTRODUCTION

Give out the containers from yesterday to the children. Ask them to compare their different containers with their friends' containers. Ask them which they think is the biggest. Ask them which they think is the smallest.

No Content Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Repeat the lesson from yesterday, making sure that you put the children into different pairs so that they have different containers to measure. This time, however, ask them to put the biggest on the left and the smallest on the right.

5 CONCLUSION AND ASSESSMENT

Check the order of a pair's containers, getting the class to watch and count as you fill the containers. Ask them how they know that one container is bigger than another.

Note which pairs could not pour water into the containers correctly, or lost count often. Use this information to plan your next lesson. Keep the containers for tomorrow.

TERM 3 WEEK 5 THURSDAY **CAPACITY**

1 OBJECTIVE

Estimate the capacity of a container and measure the amount of water it can hold.

2 STARTER

Play a flashcards number game.

3 INTRODUCTION

Tell the children how you keep and store water for drinking in your house. Ask the children if they know how they do it in their homes.

No Content Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Take out one of the larger containers and a small container. Ask the children to guess how many of the small containers will fill the big container. Write down some of the guesses on the board.

Fill the big container and ask the class to count how many small containers of water go into the big container. Repeat with a different container and one of the children pouring and the rest of the class making guesses, watching and counting.

5 CONCLUSION AND ASSESSMENT

Ask the children if they were surprised by any of the answers. Ask them if the shape of some containers makes it hard to guess. Ask them what was the easiest to guess. Ask them if the bigger ones were easier to guess or the smaller ones.

Note any children who were not able to give a good guess and use the information when planning your lesson for tomorrow.

TERM 3 WEEK 5 FRIDAY **CAPACITY**

1 OBJECTIVE

Select the biggest container from a group.

No Content Standard for this week's lessons.

Optional

2 STARTER

Sing a number song.

3 INTRODUCTION

Draw different sizes of objects on the board and ask children to point to the biggest that they can see. Repeat with wobbly or spikey shapes.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give them some different sizes of containers. Ask each pair to identify their biggest container and to hold it up. Check their selected containers.

Take all the biggest containers and put them on a desk at the front in a group. Ask the children to find the next biggest container they have. Take them and put them next to the others at the front. Repeat until all the containers are in groups at the front. Ask the children to point to the biggest containers. Ask the children to point to the smallest containers.

Ask the children which of the containers is the very biggest. Hold up containers until the children are happy that you have the very biggest.

5 CONCLUSION AND ASSESSMENT

Ask the children why or how they made their choices. Give back the named containers to the class.

Note any children who could not identify the biggest containers. Write this information in the class assessment folders.

TERM 3 WEEK 6 MONDAY **CAPACITY**

1 OBJECTIVE

Use 1L and ½L measuring containers.

2 STARTER

Ask quick-fire questions on numbers.

Sing a number song.

3 INTRODUCTION

Remind children about last week's lesson on amounts of water and how much is needed to fill a container. Introduce the word 'litre' to the children and show the children a container that can hold a litre of water.

No Content Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Show the children a 1L Coke bottle and tell them to say the word 'litre'.

Put children in pairs. Give each pair a 1L Coke bottle that you have written the children's names on.

Take the children outside – water could spill on the floor today.

Fill the 1L bottles to the top with water.

Explain what 1L is (a fixed amount of water that the whole world knows) and tell children to feel how heavy it is. Tell them to pour out half of the water. Check they have got about half in the bottles. Explain that they now have half a litre. Tell the children to feel how heavy it is. Get the children to look at the container and say the words 'half litre'.

5 CONCLUSION AND ASSESSMENT

Remind the children that litres and half litres are used all over the world. Show them a litre bottle again and a half-litre bottle.

Note which children were not able to pour out about half of their bottles and consider putting them with those who could for your next lesson.

TERM 3 WEEK 6 TUESDAY **CAPACITY**

1 OBJECTIVE

Find containers in the community that hold about 1L.

2 STARTER

Play ‘I say, you say’ as a class.

3 INTRODUCTION

Talk about some businesses in the local community that make, use or sell containers.

No Content Standard for this week’s lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Set up a small shop in the classroom before the lesson. Fill it with containers that might be seen in the local community. Include some 1L containers, e.g. oil, Coca-Cola, milk.

Ask the children which containers look as if they hold 1L. Ask them to describe the size of the 1L containers. Compare them to the bigger and smaller containers. Ask how many of the small containers might fit inside the 1L containers. Ask how many 1L ones would fit in the larger containers. Use the words ‘big’, ‘bigger’, ‘biggest’, ‘small’, ‘smaller’, ‘smallest’.

Ask children about other containers they may have seen in the community that hold liquid. Ask them how big they think they are. How many litres might they hold?

5 CONCLUSION AND ASSESSMENT

Show the children a selection of the sample containers and ask them to describe them using the words ‘big’, ‘bigger’, ‘biggest’, ‘small’, ‘smaller’, ‘smallest’.

Note which children are not using the words correctly and use this information to help plan your next lesson.

TERM 3 WEEK 6 WEDNESDAY **CAPACITY**

1 OBJECTIVE

Find containers in the community that hold about 1/2L.

2 STARTER

Sing 'I'm thinking of a number'.

Chant number rhymes.

3 INTRODUCTION

Pour a full container of 1L water out, down to its halfway mark, and explain to the children this is half a litre.

No Content Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Repeat yesterday's lesson, focusing on half-litre containers:

Set up a small shop in the classroom before the lesson. Fill it with containers that might be seen in the local community. Include some 1/2L containers, e.g. oil, Coca-Cola, milk.

Ask the children which containers look as if they hold 1/2L. Ask them to describe the size of the 1/2L containers. Compare them to the bigger and smaller containers. Ask how many of the small containers might fit inside the 1/2L containers. Ask how many 1/2L ones would fit in the larger containers. Use the words 'big', 'bigger', 'biggest', 'small', 'smaller', 'smallest'.

Ask children about other containers they may have seen in the community that hold liquid. Ask them how big they think they are. How many litres might they hold?

5 CONCLUSION AND ASSESSMENT

As yesterday, show the children a selection of the sample containers and ask them to describe them using the words 'big', 'bigger', 'biggest', 'small', 'smaller', 'smallest'.

Also, explain and summarise what ½L is and ask some questions, e.g. 'How many ½L of liquid can go into two 1L containers'?

Note which children are not using the words correctly or answering the questions correctly and use this information to help plan your next lesson.

TERM 3 WEEK 6 THURSDAY **CAPACITY**

1 OBJECTIVE

Order containers from biggest to smallest and check by measuring in L and ½L.

No Content Standard for this week's lessons.

Optional

2 STARTER

Sing a number song.

Play a flashcards number game.

3 INTRODUCTION

Show a variety of sizes of containers, from ½L to 5L, and tell children to watch carefully.

4 TEACHER AND STUDENT ACTIVITY

Arrange the containers from the biggest to the smallest.

Ask the children how many ½L they think are in the first container. Fill it with a ½L bottle of water. Get the children to count to see how many it takes to fill it.

Repeat for each container.

Ask the children if they remember how many 1/2L it took to fill each container. Check with them, then write a big number on each container, showing how many ½L are in each.

5 CONCLUSION AND ASSESSMENT

Ask children to describe and compare the containers using 'big', 'bigger', 'biggest', 'small', 'smaller', 'smallest', '1L more', '1L less', and so on.

Note which children cannot make good sentences and use this information to help plan your next lesson.

TERM 3 WEEK 6 FRIDAY **CAPACITY**

1 OBJECTIVE

Know that when ½L of water is put into different containers it will look different.

2 STARTER

Doubling and halving numbers.

Sing a number song.

3 INTRODUCTION

Show a selection of 1L containers you used earlier in the week, e.g. oil, Coca-Cola, milk. Ask the children if they remember how much each holds [they are all 1L].

Ask the children if they are the same shape. Ask them to describe the shapes. Remind them they all hold the same amount, even though they are different shapes.

No Content Standard for this week's lessons.

Optional

4 TEACHER AND STUDENT ACTIVITY

Take the children outside – water could spill on the floor today.

Put the children into pairs and give each pair some containers of different sizes. Try to use only clear or transparent containers.

Give each pair a ½ L container full of water. Tell the pairs to pour the ½L container into each of the other containers and see what the contents look like.

Go around asking the children to describe the shape of the water inside the containers. What did they see when they poured the water in [it fills up from the bottom, all the way up the sides].

5 CONCLUSION AND ASSESSMENT

Ask children to watch while you pour ½L of water into clear containers of various shape. Ask some of them to describe how the water looks.

Note the children who could not describe the shapes or process. Write this information in the class assessment folders.

TERM 3 WEEK 7 MONDAY **TIME**

1 OBJECTIVE

Estimate time for breakfast, recess and lunch hours.

2 STARTER

Sing a song of daily events using the tune of 'This is the way I brush my teeth'.

3 INTRODUCTION

Choose some children to tell the class what they did before coming to school in the morning, e.g. woke up, washed, dressed, ate and walked to school. Remind them of the time words 'morning', 'midday', 'afternoon', 'night'.

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

Note: The above information is for the whole of week 7 Term 3

4 TEACHER AND STUDENT ACTIVITY

Guide the children to name some events from pictures of some daily activities, e.g. eat, wash, get dressed, go to school.

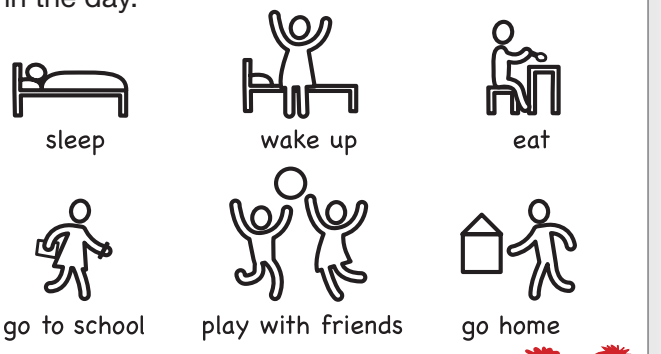
Ask which of the daily activities they do first in the morning? Put the first picture on the board at the left. Ask what they do next Put the next picture on the board. Continue until you have all the pictures in order. Take the pictures down.

Put the children in pairs and give each pair a set of the pictures, mixed up. Ask them to put the pictures in order.

Ask children to say what time of day they do the activities in the pictures.

Ask children to think and talk in their pairs about other things they do in the day and when they do them. Put the pictures back on the board in the right order.

Add some more pictures or names of events to the board, putting them in the right order and asking pairs to say when they take place in the day.



5 CONCLUSION AND ASSESSMENT

Call out some of the events from the board and ask children to say what time of day they take place.

Note down any children who cannot use the right time words and use the information to help plan your next lesson. Think about changing the pairs so that weaker children are with stronger ones.

TERM 3 WEEK 7 TUESDAY **TIME**

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

1 OBJECTIVE

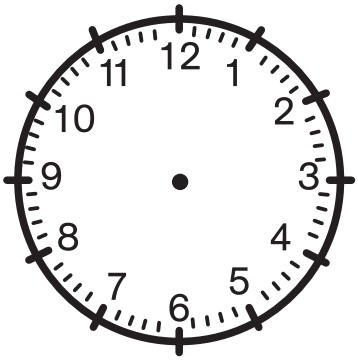
Read the clock-face in o'clock.

2 STARTER

Play the game 'What is the time, Mr Wolf?'.

3 INTRODUCTION

Show the children a clock-face and ask them if they have seen it before. Ask them to describe what they see on it [numbers 1 to 12, hands pointing to numbers, a circle].



4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give each pair a clock-face.

Show the children that the numbers go round in a circle, 12 at the top, 6 at the bottom.

Ask the children to point to the numbers on their clocks and read the numbers aloud with you. Ask which direction they go in. Demonstrate by making a big circle with your hand.

Tell the children to stand up, form circles and move around in a clockwise direction, walking, skipping and jumping.

Tell the children the names of the two hands on the clock-face [minute and hour] and demonstrate how they move clockwise round the clock-face.

Demonstrate and then ask children to point on their clock-face to where the hour hand would be at 1 o'clock, 2 o'clock, etc.

5 CONCLUSION AND ASSESSMENT

Show a clock-face with only the numbers 12 and 6. Ask children to come up and point to where the numbers 1 to 12 should be put on the clock-face and correctly name and point to the minute and hour hands. Ask children to show the class where the hour hand would be at 1 o'clock, etc.

Note children who cannot do this and remember them in your planning for tomorrow.

TERM 3 WEEK 7 WEDNESDAY **TIME**

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

1 OBJECTIVE

Tell time for 6 o'clock, 10 o'clock, 12 o'clock, 3 o'clock, etc.

2 STARTER

Play the game 'What is the time, Mr Wolf?'.

3 INTRODUCTION

Show a clock-face and ask questions, e.g. 'Where is the minute hand?' Where is the hour hand?' 'Show me clockwise with your hands.' 'Can you count with me around the clock?'.

4 TEACHER AND STUDENT ACTIVITY

Put children into pairs and give each pair a clock-face.

Ask children to move both the hands to 12.

On the teacher's large clock, show them the minute hand always on 12 and move only the hour hand to 1, 2, and 3 and ask the children to chant the times you show.

Ask children to move the hands on their clock-faces to show the times you call out.

Move around the class, checking their clocks as you call out times.

5 CONCLUSION AND ASSESSMENT

Show different times (6, 10, 12, 3 o'clock, etc.) on the teacher clock and ask children to tell the times and show them on their clock-faces.

Note any children who are having difficulty with this and use it for your planning for tomorrow.

TERM 3 WEEK 7 THURSDAY **TIME**

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

1 OBJECTIVE

Read and draw clock faces for 6 o'clock, 3 o'clock, etc.

2 STARTER

Play the game 'What is the time, Mr Wolf?'.

3 INTRODUCTION

Show different o'clock (e.g. 6, 10, 12 and 3) and ask children to say the times.

4 TEACHER AND STUDENT ACTIVITY

Prepare on the board 4 clock-faces with the 12, 3, 6, and 9 in place. Make sure each child has paper to draw their clock-faces on.

Teach children how to draw a clock-face, a big circle with the minute and hour hands showing 6 o'clock.

Practise drawing on the ground, in the air or on small blackboards before the actual drawing on paper.

Ask children to draw a circle, put the numbers in their correct places, put the minute hand on 12 and the hour hand on 6 to show 6 o'clock. Then do the same for 12 o'clock, 9 o'clock and 3 o'clock.

Show the correct answers on your clock-faces on the board.

5 CONCLUSION AND ASSESSMENT

Help children to display their completed work on the classroom wall with their names written on the top. Point out good work and give praise.

If any have made mistakes, remember it when planning your next lesson.

TERM 3 WEEK 7 FRIDAY **TIME**

1 OBJECTIVE

Read and order morning time (6 - 12) and afternoon time (12 – 6).

LESSON TOPIC: Time

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.2

2 STARTER

Sing a song of daily routines using the tune 'This is the way I brush my teeth'. Replace some words to make it more relevant to the lesson.

3 INTRODUCTION

Put the children in pairs, give out the clock-faces and get them to play a game: one calls out the time and the other shows the time on the clock-face. After several turns, tell them to swap.

4 TEACHER AND STUDENT ACTIVITY

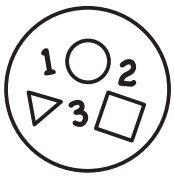
Make a large picture timetable for the week's lessons. Teach children how to order and read morning times, 6-12 (in the morning) and afternoon times, 12-6 (in the afternoon).

Link the activity to Monday's lesson, where children listed and ordered activities.

Show and teach children how to match times with the school activities.

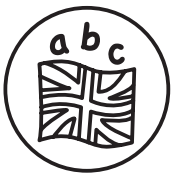
Put the children in pairs and give them pictures of lessons and activities today, with the time (to the nearest hour) written on them.

Children order and read the morning and afternoon times 6-12 in the morning, and 12-6 in the afternoon, e.g. 6 o'clock – wake up, 7 o'clock – breakfast, 10 o'clock – recess, 12 o'clock – lunch.

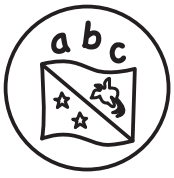


maths

culture and community



English



home language

5 CONCLUSION AND ASSESSMENT

Ask children questions to see if they can:

- read the numbers correctly in a clockwise direction
- name and identify the minute and hour hands
- read the o'clock times
- match common activities with the times

Note any children who are weaker and put the information in the class assessment folders.

TERM 3 WEEK 8 MONDAY **MONEY : COUNTING**

1 OBJECTIVE

Count out 10t coins to buy an object that is worth K2.

2 STARTER

Ask the children what animal or picture is on a 10t coin and remind them of the animals or pictures on other coins, 5t, 20t, 50t and K1. Ask the children to tell you the size and shape of the coins.

Ask them what the colour of a K2 note is and what pictures are on it.

Show them a real 10t coin and a real K2 note.

3 INTRODUCTION

Show the class three ways to group 10t coins to make K2.

1. Count out twenty 10t coins to make K2. Then show that they all add up to K2, by counting them, '10t, 20t, 30t, … K1, … K1.90, K2'.
2. Count out two groups of ten 10t coins. Then show that each group equals K1, to give a total of K2.
3. Count out four groups of five 10t coins and then show that each group equals 50t, to give a total of K2.

Explain the paper money game to the class and how it will be played during the lesson.

5 CONCLUSION AND ASSESSMENT

Ask the pairs of children that have not won an object to use the 10t cards to buy an object that is worth K2.

Note which children were unable to use the coins to get the right totals. Consider changing the pairs in tomorrow's lesson to put children who can count correctly with those who cannot.

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

Note: The above information is for the whole of week 8 Term 3

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, cut out pieces of green paper to look like K2 notes and pieces of card to look like 10t coins. Prepare at least 20 coins for each pair of children. Before the lesson, prepare some objects to sell with prices of K2 or less tagged on them.

Hang up a K2 card. In the class, Put the children into pairs and give each pair a K2 note and a least twenty 10k coins. Show the class an object that is worth K2, labelled with the price. Hang up the object.

Ask the children to count using the 10t cards to get the K2 price. Give the object as a prize to the pair that finishes first and makes the correct price.

Repeat with objects worth K1.60, K1.20, and other values.

TERM 3 WEEK 8 TUESDAY **MONEY : COUNTING**

1 OBJECTIVE

Count out 20t coins to buy an object that is worth K5.

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

2 STARTER

Ask the children what animal or picture is on a 20t coin and remind them of the animals or pictures on other coins, 5t, 10t, 50t and K1. Ask the children to tell you the size and shape of the coins.

Ask them what the colour of a K5 note is and what pictures are on it.

Show them a real 20t coin and a real K5 note.

3 INTRODUCTION

Show the class two ways to group 20t coins to make K5.

1. Count out twenty-five 20t coins to make K5.Then show that they all add up to K5, by counting them, '20t, 40t, 60t, … K4.80, K5'.
2. Count out five groups of five 20t coins. Then show that each group equals K1, to give a total of K5.

Explain the paper money game to the class and how it will be played during the lesson.

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, cut out pieces of purple paper to look like K5 notes and pieces of card to look like 20t coins. Prepare at least 25 coins for each pair of children. Before the lesson, prepare some objects to sell with prices of K5 or less tagged on them.

Repeat the lesson from yesterday, with 20t coins and K5 notes instead of 10t and K2

5 CONCLUSION AND ASSESSMENT

Ask the pairs of children that have not won an object to use the 20t cards to buy an object that is worth K5.

Note which children were unable to use the coins to get the right totals. Consider changing the pairs in tomorrow's lesson to put children who can count correctly with those who cannot.

TERM 3 WEEK 8 WEDNESDAY **MONEY : COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count out 50t coins to buy objects that are worth K5 and K10.

2 STARTER

Ask the children what animal or picture is on a 50t coin and remind them of the animals or pictures on other coins, 5t, 10t, 20t and K1. Ask the children to tell you the size and shape of the coins.

Ask them what colour a K10 note is and what pictures are on it.

Show them a real 50t coin and a real K10 note.

3 INTRODUCTION

Show the class two ways to group 50t coins to make K10.

1. Count out twenty 50t coins to make K10. Then show that they all add up to K10, by counting them, '50t, K1, K1.50, … K9.50, K10'.
2. Count out ten groups of two 50t coins. Then show that each group equals K1, to give a total of K10.

Explain the paper money game to the class and how it will be played during the lesson.

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, cut out pieces of paper to look like K5 notes (purple) and K10 notes (blue) and pieces of card to look like 50t coins. Prepare at least 20 coins for each pair of children. Before the lesson, prepare some objects to sell with prices of K10, K5 or less tagged on them.

Repeat the lesson from yesterday, with 50t coins and K5 and K10 notes instead of 20t and K5.

5 CONCLUSION AND ASSESSMENT

Ask the pairs of children that have not won an object to use the 50t cards to buy an object that is worth K5.

Note which children were unable to use the coins to get the right totals. Consider changing the pairs in tomorrow's lesson to put children who can count correctly with those who cannot.

TERM 3 WEEK 8 THURSDAY **MONEY : COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count out K1 coins to buy objects that are worth K5, K10 and K20.

2 STARTER

Ask the children what animal or picture is on a K1 coin and remind them of the animals or pictures on 5t, 10t, 20t and 50t coins. Ask the children to tell you the size and shape of the coins.

Ask them what colours K5, K10 and K20 notes are and what pictures are on them.

Show them a real K1 coin and real K5, K10 and K20 notes.

3 INTRODUCTION

Show the class two ways to group K1 coins to make various totals, e.g. K20, K9, K16.

Explain the paper money game to the class and how it will be played during the lesson.

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, cut out pieces of card to look like K1 coins and pieces of coloured paper to look like K2, K5, K10 and K20 notes. Before the lesson, prepare some objects to sell with various prices, e.g. K7, K13, K18, tagged on them.

Repeat the lesson from yesterday, with K1 coins and all the notes.

5 CONCLUSION AND ASSESSMENT

Ask the pairs of children that have not won an object to use the coins and notes to buy an object that is worth K6.

Note which children were unable to use the coins and notes to get the right totals. Consider changing the pairs in tomorrow's lesson to put children who can count correctly with those who cannot.

TERM 3 WEEK 8 FRIDAY **MONEY : COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count out coins (5t, 10t, 20t, 50t, K1) and notes (K2, K5, K10, K20) to buy objects that are worth K20 or less.

2 STARTER

Ask the children what animals or pictures are on 5t, 10t, 20t, 50t, K1 coins and remind them if needed. Ask the children to tell you the size and shape of the coins.

Ask them what colours K2, K5, K10, K20 notes are and what pictures are on them.

Show them real coins and real notes.

3 INTRODUCTION

Show the class two ways to group coins to make various totals, e.g. K4, K9, K16.

Explain the paper money game to the class and how it will be played during the lesson.

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, cut out pieces of card to look like coins and pieces of coloured paper to look like notes.

Before the lesson, prepare some objects to sell with various prices, e.g. K7, K13, K18, tagged on them.

Repeat the lesson from yesterday, with all the money.

5 CONCLUSION AND ASSESSMENT

Ask the pairs of children that have not won an object to use the coins and notes to buy an object that is worth K6.

Note which children were unable to use the coins to get the right totals. Record this information in the class assessment folders.

TERM 3 WEEK 9 MONDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Make and draw pictures of sets of objects and match them with number symbols 0 to 20 or more.

2 STARTER

Sing 'I little, 2 little, 3 little fingers' and '5 little piggies'.

3 INTRODUCTION

Use flashcards to count from 0 to 20 and back from 20 to 0. Show one flashcard and ask the children to tell you the number. Repeat with other flashcards between 0 and 20.

Draw 3 stars. Ask how many stars there are.

Tell the children the 3 is written as a number symbol like this: 3. Repeat with different numbers of stars.

Draw a picture of 10 sticks. Ask how many sticks there are. Say 10 and write it on the board.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give them number cards from 1 to 10. Ask them to choose a number and draw the correct number of stars. Repeat this activity with different numbers. If they finish this, give them cards 11 to 20.

5 CONCLUSION AND ASSESSMENT

Show a number flashcard between 0 and 20 and ask the children to say the number. Repeat for all numbers from 0 to 20.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 3 WEEK 9 TUESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Write and match pictures of sets of objects with addition and subtraction symbols.

2 STARTER

Sing 'I little, 2 little, 3 little fingers' and '5 little piggies'.

3 INTRODUCTION

Show flashcards with the addition, subtraction and equals symbols [+, - and =]. Say the words 'add', 'subtract' and 'equals'. Ask the children to repeat these words as they look at the symbols.

4 TEACHER AND STUDENT ACTIVITY

Draw a set of 4 objects and another set of 3 objects. Match the sets with the numbers. Combine these 2 sets to make 7 stones. Show the children this is written using symbols like this 4+3=7. Read the number sentence 4 add 3 equals 7. Repeat with different numbers of objects.

Now draw a set of 6 objects and cross out 2 of them. Show the children this is written using symbols like this 6-2=4. Read the number sentence 6 subtract 2 equals 4. Repeat with different numbers of objects.

Put the children into pairs. Ask them to make up their own addition and subtraction problems.

5 CONCLUSION AND ASSESSMENT

Show flashcards for +, - and =. Ask the children to say the words. Ask one pair to tell one of their problems. Can the class work out the answer? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 3 WEEK 9 WEDNESDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.1

Note: The above information is for the whole of week 9 Term3

1 OBJECTIVE

Make and write simple number series following a pattern increasing by 1.

2 STARTER

Peg number flashcards 0 to 20 on the washing line. Together count from 0 to 20 and 20 to 0. Ask the children to shut their eyes and remove one of the numbers. See if the children can guess the number. Repeat the activity removing different numbers.

3 INTRODUCTION

On the board, write 3 4 5 6 7. Show the children that every number is 1 more than the number before it. Ask the children to close their eyes and rub out one of the numbers. Ask which number you have rubbed out. Repeat with different series of numbers.

4 TEACHER AND STUDENT ACTIVITY

On the board, write these series of numbers. Ask the children to tell you which number is missing from each series.

7 8 __ 10 11

3 __ 5 6 7

16 __ 18 19 20

__ 5 6 7

Write more number series if needed.

5 CONCLUSION AND ASSESSMENT

Write a number series on the board, e.g 6 7 9 8 10. Ask the children if it is correct. If not, see if they can correct it. Repeat with other number series.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 3 WEEK 9 THURSDAY **EXTENDING PATTERNS**

1 OBJECTIVE

Make and write simple number series following a pattern increasing by 2.

LESSON TOPIC: Extending Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.1

Note: The above information is for the whole of week 9 Term3

2 STARTER

Peg number flashcards 0 to 20 on the washing line. Together count from 0 to 20 and 20 to 0. Ask the children to shut their eyes and remove one of the numbers. See if the children can guess the number. Repeat the activity removing different numbers.

3 INTRODUCTION

Write a number series on the board, e.g. 2 4 6 8 10. Remind the class that yesterday in their number series the numbers increased by 1 every time. Ask how many the numbers increase by in this series. Write another series, e.g. 6 8 __ 12 14. Ask what number is missing.

4 TEACHER AND STUDENT ACTIVITY

On the board, write these number series. Ask the children which number is missing from each series.

6 8 10 __ 14 16

3 5 7 __ 11 13

11 __ 15 17 19

Write more number series if needed.

5 CONCLUSION AND ASSESSMENT

Write a number series on the board, e.g 3 5 9 7 11. Ask the children if it is correct. If not, ask if they can correct it. Repeat with other number series. Now write 10 12 __ 16 18. Ask which number is missing.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 3 WEEK 9 FRIDAY **EXTENDING PATTERNS**

LESSON TOPIC: Extending Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.1

Note: The above information is for the whole of week 9 Term3

1 OBJECTIVE

Make and write simple number series following a pattern increasing by 5.

2 STARTER

Peg number flashcards 0 to 20 on the washing line. Together count from 0 to 20 and 20 to 0. Emphasise the numbers 5, 10, 15 and 20. Change the position of two numbers. See if the children can tell which numbers were changed. Repeat the activity changing the position of different numbers.

3 INTRODUCTION

Leave the flashcards on the washing line. Write a number series on the board where the numbers increase by 5, e.g. 0 5 10 15 20. Point to the flashcards as you say the numbers. See if the children can tell you what the pattern is today [increasing by 5]. Now write 1 6 11 16 and point to the numbers on the number line. Remind them the pattern is the numbers increase by 5.

4 TEACHER AND STUDENT ACTIVITY

On the board, write these number series. Ask the children which number is missing from the first number series. Tell them to use the flashcards to count on 5 if they need help to find the missing number. Repeat for the other number series:

5 __ 15 20

2 7 __ 17

1 6 11 __

Write more number series if needed.

5 CONCLUSION AND ASSESSMENT

Write a number series on the board, e.g 3 8 14 18. Ask the children if it is correct. If not, ask if they can correct it Repeat with other number series. Now write 5 10 __ 20. Ask which number is missing.

Make a note of those children who are not able to do this and those finding it too easy. Write this information in the class assessment folders.

TERM 4 WEEK 2 MONDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

Note: The above information is for the whole of week 2 Term 4

1 OBJECTIVE

Count objects 1 to 20 and count backwards 20 to 1 in a language that the children know best.

2 STARTER

Play 'I am thinking of a number', e.g. 'It is 2 more than 3', 'It is 5 more than 1', and so on.

3 INTRODUCTION

Use flashcards to count from 0 to 20 and back from 20 to 0. Show one flashcard and ask the children to tell you the number in English and in their own language. Repeat with other flashcards 0 to 20.

Encourage the children to count from 0 to 20 and back from 20 to 0 using their fingers and toes in both their home language and English.

4 TEACHER AND STUDENT ACTIVITY

Put children in pairs and give them number card pictures to colour. When they are finished, ask them to put them in order from 1 to 20. Tell them to use the cards to count from 0 to 20 and 20 to 0 in English.

Sing the song 'Ten green bottles'.

5 CONCLUSION AND ASSESSMENT

Show a number flashcard between 0 and 20 and ask the children to say the number in English and in their own language. Repeat for all numbers from 0 to 20.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 4 WEEK 2 TUESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Say numbers 0 to 20 and count backwards 20 to 0 in the children's home language and English.

2 STARTER

Play 'I say you say'. The rule is 1 less, e.g. 'I say 3, you say 2'.

3 INTRODUCTION

Bring 10 children to the front of the class and give each child a number card between 0 and 10. Mix the children up and ask them to put themselves in order from 0 to 10.

Bring 10 different children to the front and give each child a number card between 11 and 20. Mix the children up and ask them to put themselves in order.

4 TEACHER AND STUDENT ACTIVITY

Take the children outside and put them in a line. Walk forward 20 steps, counting each step in English. Turn around and walk back 20 steps, counting back from 20 to 0 in English.

Give each child a number card between 0 and 20. Call out a number in English and children with that number card sit down. Repeat for all the numbers from0 to 20. Give each child a different number card and repeat.

Clap 10 times and ask the children to say how many claps. Repeat with different numbers.

5 CONCLUSION AND ASSESSMENT

Count from 0 to 20 and back from 20 to 0 in English and the children's own language. Show a number flashcard between 0 and 20 and ask the children to say the number in English and in their own language. Repeat for all numbers 0 to 20.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 4 WEEK 2 WEDNESDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Translate home language words for 0 to 20 into English and count objects from 0 up to 20 and backwards from 20 to 0 in both the children's home language and English.

2 STARTER

Quickly show the children a card with 6 dots on it. Hide the card. Ask the children how many dots there were. Show the card again and count the dots to see if they were correct? Repeat with other cards with numbers from 1 to 10.

3 INTRODUCTION

Show a flashcard for 10 and ask the number in the child's own language and English. Repeat for all numbers from 0 to 20.

Clap 6 times and ask the children to say how many claps in their own language and in English. Repeat with different numbers.

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, prepare potato shapes so the children can make prints.

Put the children in pairs. Ask each child to make potato prints on a blank sheet of paper and to count them with their friend when the paper is full. Repeat this activity if there is time.

5 CONCLUSION AND ASSESSMENT

Count from 0 to 20 and back from 20 to 0 in English and the children's own language. Ask one pair to show their page of patterns and to count them. Does the class agree they are correct? Repeat this activity with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 4 WEEK 2 THURSDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count objects from 0 to 20 in different sets of objects in both the children's home language and English.

2 STARTER

Play 'I am thinking of a number', e.g. 'I am thinking of a number. It is more than 6 and less than 8'. Repeat with other numbers from 0 to 20.

3 INTRODUCTION

Show a flashcard for 10 and ask the number in the children's own language and English. Ask how many stones you would need to put on it to match the number. Count out 10 stones and put them on the card. Repeat with other numbers.

4 TEACHER AND STUDENT ACTIVITY

Put children in pairs and give them a pile of small objects. Give each pair 3 number cards.

Tell the children to say the number in their own language and in English and to count the correct number of objects to put on each card.

When they can do this confidently, give them different number cards.

5 CONCLUSION AND ASSESSMENT

On the board, draw 8 objects. Ask which number card would go with this set of objects. Repeat with different numbers of objects.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when you plan tomorrow's lesson.

TERM 4 WEEK 2 FRIDAY **COUNTING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.1

1 OBJECTIVE

Count object from 0 to 20 and count backwards from 20 to 0 in both the children's home language and English.

2 STARTER

Count around the class in English. The first child says 0, the second 1, and so on. Count from 0 to 20 and 20 to 0. Count again and try to do it more quickly. Repeat in the children's home language.

3 INTRODUCTION

Make up a short number story. Every time the children hear a number, they put their hands up and say the number, e.g. Mary went for a walk with her 3 brothers. The walked past 2 big trees and they saw 4 dogs. They went to the beach and found 10 shells. On the way home they stopped in the shop and bought 4 biscuits. They got home at 5 o'clock.

4 TEACHER AND STUDENT ACTIVITY

Put children into pairs. Give them a pile of small objects. Ask them to count out 20 objects and put the objects in a line. Use the objects to practise counting from 0 to 20 and back from 20 to 0.

In the same pair, ask one child to tell a number story and the other child to put up a hand when they hear a number. Ask them to take turns to make up stories.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell a story. Ask the class to put up their hands when they hear a number. Repeat with another pair. Count from 0 to 20 and back from 20 to 0 in English and the children's own language.

Make a note of those children who are not able to do this and those finding it too easy. Put this information in the class assessment folder.

TERM 4 WEEK 3 MONDAY **COMPARING AND ORDERING**

1 OBJECTIVE

Count reliably from 1 to 20 objects of different colours, shapes and sizes.

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.3

Note: The above information is for the whole of week 3Term4

2 STARTER

Sing '5 little birds' and '10 in the bed'.

3 INTRODUCTION

Show children a small red circle and ask them to describe it. Repeat with other coloured shapes.

4 TEACHER AND STUDENT ACTIVITY

Put children into pairs. Give each pair a pile of different coloured shapes, e.g. circles, triangles, squares and diamond small objects. Ask them to pick out 4 red circles and put them in a line. Then pick out 3 blue triangles and add them to the line. Now pick out 4 green squares and add them to the line. Ask the children to count how many shapes they have in the line. Repeat this using different numbers.

In the same pairs, ask one child to tell the other what shapes to pick out. Ask the pair to count together how many shapes are in the line. Repeat the activity.

5 CONCLUSION AND ASSESSMENT

Show the children a string with different coloured shapes on it. Ask them to count how many shapes are on the string. Repeat the activity with a different string.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

TERM 4 WEEK 3 TUESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.3

1 OBJECTIVE

Compare and order as first, second, third and last objects of different colours and shapes.

2 STARTER

Play 'I'm thinking of a number', e.g. 'I am 2 more than 12'; I am 2 less than 13', and so on.

3 INTRODUCTION

Remind the children of the words 'first', 'second', 'third' and 'last'. Ask them to repeat the words.

Line up 20 children at the front of the class. Have the first child say 1, the second 2, and so on to 20. Ask the class to say who is first in the line, who is second, who is third and who is last.

4 TEACHER AND STUDENT ACTIVITY

Line up 20 different children. Ask the class who should be first in the line. Move that child to the first place. Repeat the activity for second, third and last. Repeat the whole activity with different children in first, second, third and last place.

Put children into pairs. Give each pair a string of 4 different coloured shapes. Ask them to tell each other which is first, second, third and last.

5 CONCLUSION AND ASSESSMENT

Show children a string with different coloured shapes on it. Ask them which shapes are first, second, third and last. Repeat the activity with a different string.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

TERM 4 WEEK 3 WEDNESDAY **COMPARING AND ORDERING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.3

1 OBJECTIVE

Order 0 to 20 objects on number lines.

2 STARTER

Peg number flashcards on a washing line and count from 0 to 20 and back from 20 to 0. Tell the children to close their eyes while you change the places of two of the cards. Ask them to tell you which flashcards you have moved. Repeat, moving different flashcards.

3 INTRODUCTION

Show children a number flashcard. Ask them to say the number. Put a pile of objects on the table and ask one child to count out the number of objects that match that number. Put the objects on the flashcard on the table.

Repeat for numbers from 10-20.

Ask the children to help you to put the objects in the correct order from 10-20.

4 TEACHER AND STUDENT ACTIVITY

Put the children in pairs. Give each pair a number and ask them to draw that many objects on a piece of paper. Peg the drawings on the washing line.

5 CONCLUSION AND ASSESSMENT

Ask the class to help you put the drawings into the correct order from 0 to 20.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

TERM 4 WEEK 3 THURSDAY **COMPARING AND ORDERING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.3

1 OBJECTIVE

Compare large and small numbers. Increase numbers by 1, 3 and 5.

2 STARTER

Say a number and ask the children to clap their hands that many times. Repeat the activity with different numbers from 0 to 20.

Clap your hands and ask the children to say how many times you clapped. Repeat the activity with different numbers.

3 INTRODUCTION

Show two number flashcards and ask the children which is bigger and which is smaller. Repeat the activity with other pairs of numbers.

4 TEACHER AND STUDENT ACTIVITY

Peg the number flashcards from 0 to 20 on a washing line. Write a number on the board. Ask which number is 1 more, which number is 3 more and which number is 5 more. Write these numbers on the board. (Tell the children they can use the number flashcards to help them find these answers.) Ask which is the biggest number and which is the smallest. Repeat this activity with different numbers.

Put children into pairs. Give them a number. Tell them to draw that number of objects. Tell them to draw next to it another group of objects that is more than the first set.

5 CONCLUSION AND ASSESSMENT

Ask one pair of children to show you their drawing. Ask them how many are in each group. Ask which group has more. Does the class agree? Choose another pair and repeat the activity.

Make a note of those children who are not able to do this and those finding it too easy. Use this information to plan tomorrow's lesson.

TERM 4 WEEK 3 FRIDAY **COMPARING AND ORDERING**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.3

1 OBJECTIVE

Compare bigger and smaller numbers on a number line.

2 STARTER

Play 'I say, you say'. Your rule is 2 more, e.g. 'I say 3, you say 5'. Repeat for all numbers from 0 to 20. Change the rule to 1 less, e.g. 'I say 5, you say 4'.

3 INTRODUCTION

Write the numbers 0 to 20 in a line on the board. Point to 12 and ask a child to point to any number that is bigger. Ask other children to point to other bigger numbers. Now ask a child to point to any number that is smaller. Ask other children to point at other smaller numbers.

4 TEACHER AND STUDENT ACTIVITY

Give number flashcards from 0 to 20 to children. Ask them to sit in a line at the front of the class. Call out 7 and ask those children who have a bigger number to stand up. Tell them to sit down. Call out 13 and ask those who have a smaller number to stand up. Tell them to sit down. Repeat this activity with different numbers.

Put children into pairs. Ask one child to say a number and the other child to say a number that is bigger and a number that is smaller. Repeat this activity.

5 CONCLUSION AND ASSESSMENT

Write 0 to 20 on the board. Point to 2 numbers and ask which is bigger and which is smaller. Repeat this with different numbers.

Make a note of those children who are not able to do this and those finding it too easy. Write this information down in the class assessment folders.

TERM 4 WEEK 4 MONDAY **ADDITION AND SUBTRACTION**

1 OBJECTIVE

Solve simple addition problems from stories using 1 to 20 or more.

2 STARTER

Play a game of 'Tell me how many objects in my left hand and how many objects in my right hand' using stones, seeds, etc. Play the game by closing and opening the palms of the hands.

3 INTRODUCTION

Tell an addition problem, e.g. '3 small boys went to the coconut plantation and collected 5 coconuts each. How many coconuts did they collect altogether?' Ask the children how to find the answer. Show them how to draw 3 sets of 5 coconuts. Count all of the coconuts.

Repeat with another story, e.g. '2 girls went to market and bought 3 bananas and 4 mangoes. How many pieces of fruit did they buy?'

LESSON TOPIC: Word Problems

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

Note: The above information is for the whole of week 4Term4

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give them paper and pencils. Tell them to make up 5 different number stories and to show how they found the answers.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell a number story and show how they found the answer. See if the class agrees? Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 4 TUESDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Word Problems

STRAND: Number and Operation

CONTENT STANDARD: P.1.6

1 OBJECTIVE

Solve simple subtraction problems from stories using 1 to 20 or more.

2 STARTER

Play 'I'm thinking of a number', e.g. 'My number is 2 more than 8', 'My number is 1 less than 19', 'My number is more than 11 but less than 13'.

3 INTRODUCTION

Tell the children a simple number story, e.g. 'There were 10 monkeys sitting in a tree. 2 ran away. How many monkeys were left?' Ask the children how to find the answer. Draw 10 monkeys. Count them together. Cross out 2. Count how many are left.

Repeat using different numbers.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give them paper and pencils. Tell them to make up 5 different subtraction number stories and to make drawings to show how they found the answers.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell a number story and show how they found the answer. See if the class agrees. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 4 WEDNESDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Word Problems

STRAND: Number and Operation

CONTENT STANDARD: P.1.5, P.1.6

1 OBJECTIVE

Solve simple addition and subtraction problems from stories using 1 to 20 or more.

2 STARTER

Play 'I say, you say'. The rule is 2 more, e.g. 'I say 11, you say 13'. Repeat with other numbers. Change the rule to 2 less and repeat.

3 INTRODUCTION

Tell the children a subtraction number story, e.g. 'Ana had 12 eggs. She gave 5 to a friend and she cooked 2. How many eggs were left?' Ask the children how to find the answer. Draw 12 eggs on the board. Cross out 5 eggs and cross out 2 more eggs. Count how many eggs are left.

Tell the children an addition number story, e.g. 'There were 3 birds sitting in a tree. 10 more birds flew in. How many birds were in the tree?' Ask the children how to find the answer.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give them paper and pencils. Tell them to make up 2 subtraction stories and 2 addition stories using numbers up to 20.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell a number story. See if the class can give the correct answer and say how they did it. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 4 THURSDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Word Problems

STRAND: Number and Operation

CONTENT STANDARD: P.1.5, P.1.6

1 OBJECTIVE

Make simple addition and subtraction stories for other children using 1 to 20 or more.

2 STARTER

Peg flashcards from 0 to 20 on a washing line. Together count from 0 to 20 and back from 20 to 0. Ask the children to close their eyes. Remove 1 of the cards and ask the children to say which number has been removed. Repeat, removing different numbers.

3 INTRODUCTION

Tell a simple addition story, e.g. 'I looked in the draw and I found 4 knives, 6 forks and 7 spoons'. How many things did I find? Ask the children how to find the answer. Draw the objects for the children to count. Remind them to start with the biggest group.

Tell a subtraction story, e.g. 'There were 16 guavas hanging on a tree. The wind blew 8 of them off the tree. How many guavas were left on the tree?' Ask the children how to find the answer. Draw 16 guavas. Cross out 8. Count how many are left.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Ask one child to make up a number story. Ask the other child to find the answer. Tell them to make up 3 subtraction stories and 3 addition stories using numbers up to 20. Get them to take it in turns to tell the stories and find the answers.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell an addition number story. Ask the class how they will find the answer – adding or subtracting? See if the class can give the correct answer. Repeat with a pair telling a subtraction story. Repeat this activity with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 4 FRIDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Word Problems

STRAND: Number and Operation

CONTENT STANDARD: P.1.5, P.1.6

1 OBJECTIVE

Make simple addition and subtraction problems for other children using 1-20 or more.

2 STARTER

Count around the class from 0 to 20 and 20 to 0. The first child says 0, the second 1 and so on to 20. Then count back in the same way. Repeat the activity slowly. Repeat the activity quickly.

3 INTRODUCTION

Tell a simple addition story, e.g. 'Raka has 10 pencils, 5 books and 3 erasers to give to his group. How many things does he have?' Ask the children how to find the answer. Draw the objects for the children to count. Remind them to start with the biggest group.

Tell a subtraction story, e.g. 'James caught 19 fish and gave 5 to his friends. How many did he have left?' Ask the children how to find the answer. Draw 19 fish. Cross out 5. Count how many are left.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Ask one pair to make up a story for another pair to find the answer. Get the pairs to take it in turns to make up the stories. Tell them to make up 3 subtraction stories and 3 addition stories using numbers up to 20.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell an addition number story. Ask the class how they will find the answer – adding or subtracting? See if the class can give the correct answer. Repeat with a pair telling a subtraction story. Repeat this activity with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Write this information in the class assessment folders.

TERM 4 WEEK 5 MONDAY **LENGHT**

LESSON TOPIC: Compare height and length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

Note: The above information is for the whole of week 5 Term 4

1 OBJECTIVE

Measure children of different heights (shortest to tallest) using sticks/string/rope and compare their heights.

2 STARTER

Select two children of different heights to stand in front of the class. Ask the class which child is shorter and which is taller.

3 INTRODUCTION

Select two other children and help them to show the class how to measure their heights using sticks/rope/string and counting.

4 TEACHER AND STUDENT ACTIVITY

Before the lesson, prepare sticks/rope/string, all of the same length (about 7cm).

Put the children into pairs. Ask the children to measure each other with the sticks/rope/string and counting. When they have finished, get them to check their answers with another pair.

Ask the children to record their heights.

5 CONCLUSION AND ASSESSMENT

Write the heights of the children on the board. Find your record of the heights measured in Term 2 Week 9. Compare the heights of the children then and the heights of the children now.

If any children had difficulty with the activity, consider pairing them with stronger children tomorrow.

TERM 4 WEEK 5 TUESDAY **LENGHT**

LESSON TOPIC: Compare height and length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Measure the lengths of classroom furniture using hand spans, arm lengths, steps, sticks and ropes and compare their lengths.

2 STARTER

Introduce the words 'long', 'short', 'longer', 'shorter'. Ask the children to look around the classroom and choose two objects – one short and the other long. Ask them to describe and compare the objects using the words longer or shorter.

3 INTRODUCTION

Use the board or any other object in the classroom to show the children how to measure length using hand spans, counting as you go.

Ask the children to measure the lengths of their exercise book and their desk using their hand span. Check that they got reasonable numbers.

4 TEACHER AND STUDENT ACTIVITY

Draw a table on the board, with the children's names against the total number of hand spans for some of the furniture in the classroom, e.g. width of chair, width of desk.

Put the children into pairs. Ask each pair to take turns to measure classroom furniture using their hand spans, with one child measuring and the second child counting the number of hand spans, and then the pair swapping.

Record the total number of hand spans for each piece of furniture on the board.

5 CONCLUSION AND ASSESSMENT

Ask individual children for their total hand spans and to compare the number with their friends.

Note any children who had trouble counting and remembering and use this information to help plan your lesson for tomorrow.

TERM 4 WEEK 5 WEDNESDAY **LENGHT**

LESSON TOPIC: Compare height and length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Measure the height of classroom furniture using hand spans, arm lengths, steps, sticks and rope and compare the heights.

2 STARTER

Ask each child to stand near the board and mark their height on the board with chalk. Ask the class who is taller than a first child. Ask who is shorter than a second child.

3 INTRODUCTION

Show the class how to measure height of using hand spans, arm lengths, steps, sticks or rope (7cm lengths). Tell the children that they will be measuring the height of things using sticks today.

4 TEACHER AND STUDENT ACTIVITY

Draws a table on the board, with the children's names against the total number of hand spans for some of the furniture in the classroom, e.g. height of chair, height of desk.

Put the children into pairs. Ask each pair to take turns to measure classroom furniture using their sticks, with one child measuring and the second child counting the number of sticks, and then the pair swapping.

Record the total number of sticks for each piece of furniture on the board.

5 CONCLUSION AND ASSESSMENT

Compare and discuss any differences in the results. Ask some pairs to repeat their measurements while the class watches and counts. Note if the pairs did it well. Show the children how they could improve.

Note any children who had difficulties and consider pairing them with other children in tomorrow's lesson.

TERM 4 WEEK 5 THURSDAY **LENGHT**

LESSON TOPIC: Compare height and length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Measure and compare the lengths of different buildings around the school using hand spans, arm lengths, steps, sticks and rope/string.

2 STARTER

Remind the children of the different informal ways to measure length. Show them how by counting how many steps it takes to walk from one end of the classroom to the other end, with the children counting along.

3 INTRODUCTION

Explain that the hand is too small to measure big things and it would take too long. Ask some children to measure the length of the classroom using steps. Ask the class to compare the results. Ask why some of the numbers are different.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Put the pairs into 2 groups. Give each pair in group 1 a stick (70cm long).

Take the children outside. Ask the children in group 1 to measure the length of school buildings using the sticks, with one child in each pair measuring and the other counting and recording the numbers.

Ask the children in group 2 to measure the same buildings, but using steps, with one child stepping and the other counting and recording the numbers.

5 CONCLUSION AND ASSESSMENT

Compare and discuss the differences in the results of the two groups and asks the class which way of measuring is better.

Ask the children if all the stick measurements were the same. Ask them if all the step measurements were the same. Ask them if it matters if they not are the same.

Note any children who had difficulties and consider pairing them with other children in tomorrow's lesson.

TERM 4 WEEK 5 FRIDAY **LENGTH**

LESSON TOPIC: Compare height and length

STRAND: Quantities and Measurement

CONTENT STANDARD: P.2.1

1 OBJECTIVE

Pick something to measure and use the most appropriate informal way to measure them.

2 STARTER

Remind the children of the different informal ways to measure length. Ask the class to guess how many sticks high their classroom is.

3 INTRODUCTION

Measure the length and height of the board using a stick (70cm long).

Draw a picture of the board and write the measurements for the length and height of the board on the sides of the drawing.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Put the pairs into two groups.

Give each pair in group 1 small sticks (7cm long) and ask them to measure things in the classroom that can be measured easily using small sticks, hand spans and arm lengths. Give each pair in group 2 sticks/string (70cm long) and ask them to find and measure things that can be measured easily by steps, sticks and rope/string.

5 CONCLUSION AND ASSESSMENT

Discuss with the children what they found out. Ask them what is best for measuring big things. Ask them what is best for measuring small things.

Pick out some objects and ask them how they would measure them.

Make a note of any children who could not measure correctly or did not understand the objective and record them in the class assessment folder.

TERM 4 WEEK 6 MONDAY **ADDITION AND SUBTRACTION**

1 OBJECTIVE

Solve simple picture addition problems using 0 to 20 or more.

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.5

Note: The above information is for the whole of week 6 Term 4

2 STARTER

Quickly show a flashcard with 6 dots. Hide the card. Ask how many dots were on the card. Count the dots to see if the children's answer is correct. Repeat with other flashcards with dots from 1 to 10.

3 INTRODUCTION

Revise addition problems from 0 to 20 using objects, e.g. 5 stones add 2 more stones equals 7 stones. 11 stones add 8 more stones equals 19 stones. Draw 11 squares and 3 triangles on the board. Ask the children how many shapes there are. Remind them that to find the answer they count the shapes, starting with the bigger group.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give each pair 4 cards with different numbers of shapes on them. Ask them to make up at least 6 addition problems using these numbers.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to say one of their problems and show how they found the answer. See if the class agrees. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 6 TUESDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.6

1 OBJECTIVE

Solve simple picture subtraction problems using 0 to 20 or more.

2 STARTER

Play 'I say, you say'. The rule is 3 more, e.g. 'I say 11, you say 14'. Repeat with other numbers. Change the rule to 1 less and repeat.

3 INTRODUCTION

Revise how to find the answer to a simple subtraction problem, e.g. 16 squares subtract 4 squares. Ask the children how to find the answer. Draw 16 squares on the board. Cross out 4. Count how many are left.

Repeat with different numbers.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give each pair 4 cards with different numbers of shapes on them. Ask them to make up at least 6 subtraction problems using these numbers. Tell them to make drawings to show what they did.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to say one of their problems and show how they found the answer. See if the class agrees. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 6 WEDNESDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.5, P.1.6

1 OBJECTIVE

Solve simple addition and subtraction problems from stories using 0 to 20 or more.

2 STARTER

Play 'I say, you say'. The rule is 3 more, e.g. 'I say 11, you say 14'. Repeat with other numbers. Change the rule to 1 less and repeat.

3 INTRODUCTION

Tell a number story, e.g. 'There were 20 small fish swimming in the sea. A big fish ate 5 of them. How many were left?' Ask the children if they will add or subtract to find the answer. Draw 20 fish on the board and cross out 5. Count how many are left.

Tell another story, e.g. 'There were 12 children sitting in the classroom. 6 more arrived late. How many children were there altogether?' Ask the children if they will add or subtract to find the answer. Bring 12 children to the front and then 6 more. Count how many there are altogether.

Repeat with different numbers.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give each pair 4 cards with different numbers of shapes on them. Tell them to make up 3 addition stories and 3 subtraction stories using these numbers.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell one of their addition stories. See if the class can find the answer. Now tell one of their subtraction stories. See if the class can find the answer. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 6 THURSDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.5, P.1.6

1 OBJECTIVE

Make simple addition and subtraction stories for other children using 0 to 20 or more.

2 STARTER

Sing 'One little, two little, three little Indians'. Sing up to 20 little Indians. Get the children to count on their fingers and toes as they sing.

3 INTRODUCTION

Tell a number story, e.g. 'There were 19 cakes on a tray. 15 boys took one each. How many were left?' Ask the children if they will add or subtract to find the answer. Draw 19 cakes on the board and cross out 4. Count how many are left.

Tell another story, e.g. 'There were 14 people on the bus. 5 more got on at the next stop. How many people were on the bus altogether? Ask the children if they will add or subtract to find the answer. Bring 14 children to the front and then 5 more. Count how many there are altogether.

Repeat with different numbers.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give each pair 4 cards with different numbers on them. Tell them to take it in turns to make up a number story for their partner to answer. Ask them to make up 3 addition stories and 3 subtraction stories using these numbers.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell one of their subtraction stories. See if the class can find the answer. Now ask them to tell one of their addition stories. See if the class can find the answer. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Use this information when planning tomorrow's lesson.

TERM 4 WEEK 6 FRIDAY **ADDITION AND SUBTRACTION**

LESSON TOPIC: Counting

STRAND: Number and Operation

CONTENT STANDARD: P.1.5, P.1.6

1 OBJECTIVE

Make simple addition and subtraction stories for other children using 0 to 20 or more.

2 STARTER

Count around the class from 0 to 20 and 20 to 0. The first child says 0, the second 1 and so on to 20. Then count back in the same way. Repeat the activity slowly. Repeat the activity quickly.

3 INTRODUCTION

Tell a number story, e.g. 'There were 20 bottles of water in the shop. The shop owner sold 14 bottles. How many were left?' Ask the children if they will add or subtract to find the answer. Draw 20 bottles on the board. Cross out 14. Count how many are left.

Tell another story, e.g. 'There were 6 tomatoes and 9 onions on the market stall. How many things were there altogether?' Ask the children if they will add or subtract to find the answer. Draw 6 tomatoes and 9 onions on the board. Remind the children to start counting with the bigger group.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give each pair 4 cards with different numbers on them. Tell them to take it in turns to make up a number story for their partner to answer. Get them to make up 3 addition stories and 3 subtraction stories using these numbers.

Move around the class listening to the pairs. Give help to those who are having problems and give bigger numbers to those who are finding it easy.

5 CONCLUSION AND ASSESSMENT

Ask one pair to tell one of their subtraction stories. See if the class can find the answer. Now ask them to tell one of their addition stories. See if the class can find the answer. Repeat with other pairs.

Make a note of those children who are not able to do this and those finding it too easy. Write this information in the class assessment folders.

TERM 4 WEEK 7 MONDAY **ANGLES AND DIRECTION**

LESSON TOPIC: Direction

STRAND : Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Follow simple instructions to move forwards and backwards up to 20 steps.

2 STARTER

Play 'Simon says' with the class, e.g. 'Simon says step forwards, step backwards, stand up, sit down.'

3 INTRODUCTION

Explain forwards and backwards, e.g. 'Step forwards three paces, move your pencil forwards, walk backwards slowly.'

Bring 5 children to the front and ask the rest of the class to give them forwards and backwards instructions.

4 TEACHER AND STUDENT ACTIVITY

Take the class outside.

Use flashcards to show directions.

Illustrate the words by showing forwards and backwards directions.

Put the children into pairs. Ask one of each pair to practice giving the other child forwards and backwards instructions.

Teach the children more complicated instructions, e.g. 'Move forwards 10 steps and backwards 5 steps.'

Ask the children to make up forwards and backwards questions, e.g. 'How many steps do I need to walk to get to the toilets?'

5 CONCLUSION AND ASSESSMENT

Put the children into pairs. Ask the children to tell each other stories that use forwards and backwards movements, e.g. traditional dance steps, throwing a fishing line and pulling it back, swinging a baby in a bilum, going to the garden and returning, etc.

Note any children who had difficulties and consider pairing them with other children in tomorrow's lesson.

TERM 4 WEEK 7 TUESDAY **ANGLES AND DIRECTION**

LESSON TOPIC: Direction

STRAND : Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Follow simple instructions to move forwards, sideways and backwards up to 20 steps.

2 STARTER

Take the class outside. Play 'Simon says' for forwards and backwards, e.g. 'Simon says hop three steps forwards. Simon says jump backwards one step.'

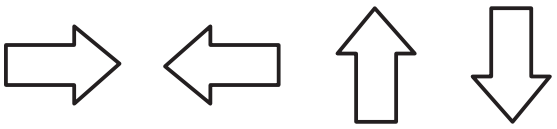
3 INTRODUCTION

Explain sideways, e.g. 'Move 5 steps sideways, move your desk sideways.'

Take the class outside. Ask one child to give two-step instructions to the rest of the class, e.g. 'Jump three steps forwards and one step sideways.'

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give the pairs of children direction arrows and number cards.



Ask the children to use the arrows and cards to form direction sentences e.g. 'Forwards 3, backwards 2, sideways 3.' Then ask them to read them out for other children to follow.

Tell the children to use their collection to demonstrate the sideways direction.

5 CONCLUSION AND ASSESSMENT

Choose the best (and longest) number sentences for the children to follow.

Ask the children to write instructions to walk in a rectangular path.

Ask the children to find things in the community that go sideways, e.g. smoke from a fire, branches of trees.

Note any children who had difficulties and use the information when you prepare tomorrow's lesson.

TERM 4 WEEK 7 WEDNESDAY **ANGLES AND DIRECTION**

LESSON TOPIC: Direction

STRAND : Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Follow simple instructions to move to the left up to 20 steps.

2 STARTER

Play 'Simple Simon', including sideways, e.g. 'Simon says jump sideways and then step forwards.'

3 INTRODUCTION

Explain the word left, e.g. 'Turn to the left. The left-hand side.' Ask the children to point to their left hand, left ear, nose and eyes. Give the children arrows which they can put on their desk to show left.

4 TEACHER AND STUDENT ACTIVITY

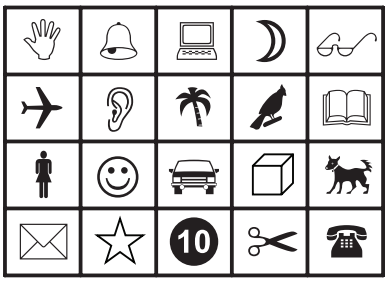
Take the children outside and ask them to follow directions, e.g. 'Walk forwards 10 steps and then turn left and walk 5 steps.'

Put the children into pairs. Ask them to give directions to their partner using forwards, backwards, sideways, left.

5 CONCLUSION AND ASSESSMENT

Ask the children to use objects like sticks and bottle caps to demonstrate left, e.g. 'How many stones are to the left of the bottle cap? Put the stick on the left side of the door.'

Use a chart like the one below. Point to a picture and ask a child to name a picture that is to the left. Test that all the children can use the word left correctly.



Note any children who had difficulties and use the information when you prepare tomorrow's lesson.

TERM 4 WEEK 7 THURSDAY **ANGLES AND DIRECTION**

1 OBJECTIVE

Follow simple instructions to move to the right up to 20 steps.

LESSON TOPIC: Direction

STRAND : Geometrical Figures

CONTENT STANDARD: P.3.1

2 STARTER

Play 'Simon says', including sideways and left.

3 INTRODUCTION

Explain the word right, e.g. 'Turn to the right. The right-hand side.' Ask the children to point to their right hand, right ear, nose and eyes. Give the children arrows which they can put on their desk to show right.

4 TEACHER AND STUDENT ACTIVITY

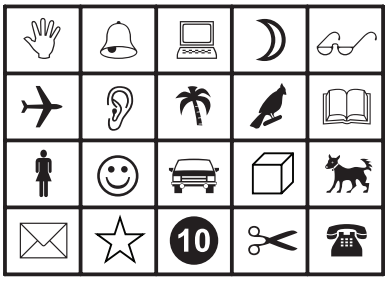
Ask the children to point to their left and right hands, right and left ears, nose and left and right eyes.

Take the children outside. Ask them to follow your marching orders, e.g. 'Right turn, left turn, stop, forward march 10 steps.'

5 CONCLUSION AND ASSESSMENT

Ask the children to use objects like sticks and bottle caps to demonstrate right and left, e.g. 'How many stones are to the right of the bottle cap? Put the stick on the left side of the door'.

Use a chart like the one below. Point to a picture and ask a child to name a picture that is to the left or right. Test that all the children can use the words left and right correctly.



Note any children who had difficulties and use the information when you prepare tomorrow's lesson.

TERM 4 WEEK 7 FRIDAY **ANGLES AND DIRECTION**

LESSON TOPIC: Direction

STRAND : Geometrical Figures

CONTENT STANDARD: P.3.1

1 OBJECTIVE

Follow 2-step instructions, e.g. 'Move forward 6 steps and right 3 steps.'

2 STARTER

Play 'Simon says', including sideways, left and left.

3 INTRODUCTION

Explain up and down, e.g. stand up, sit down.

Play 'Simon says', including up and down.

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs. Give the children direction arrows and number cards.

Ask the pairs to form 2-step instructions, e.g. 'Stand up, walk backwards 2 steps.'

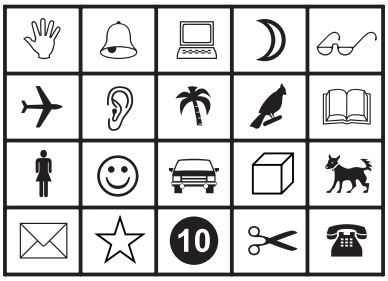
Ask them to form 3-step instructions, e.g. 'Turn left, walk forwards 10 steps, turn right.'

Ask them to form 4-step instructions, e.g. 'Sit down, turn right, turn right, stand up.'

Ask 3 children to show the class their instructions. If children want to try more steps then let them.

5 CONCLUSION AND ASSESSMENT

Use a chart like the one below. Assess the children's understanding of the new directions by asking them to name pictures using direction, e.g. 'Start at the envelope, go 3 steps right and 3 steps up. What do you find?'



Make a note of those children who are not able to do this and those finding it too easy. Write this information down in the class assessment folders.

TERM 4 WEEK 8 MONDAY **REPRESENTING & INTERPRETING**

1 OBJECTIVE

Sort objects into two groups using the children's own rules.

2 STARTER

Play the game 'I say, you say'. Tell the children that they have to say the number that is 2 more than the number you say, e.g; 'I say 1, you say 3, I say 2, you say 4'. Continue to 10.

3 INTRODUCTION

Before the lesson, prepare lots of cards with some numbers, shapes and letters that the children know.

Tell the children that they are going to look at sorting things. Hold up two of the cards, a shape and a letter. Ask the children if the two things belong together. Put the shape on the board at the left. Put the letter on the board on the right.

Continue holding up cards, putting them in the right groups, until you are happy that the children understand.

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

Note: The above information is for the whole of week 8 Term 4

4 TEACHER AND STUDENT ACTIVITY

Put the children into pairs and give out various sets of objects or cards.

Ask the pairs to sort objects and cards into two or more groups, e.g.

- by amounts (between 4 and 10), e.g. 5 stones, 6 stones, 7 stones, 8 stones, 9 stones
- by colours, e.g. red buttons, black beads, red ribbons, black paper
- by day cards for all the days of the week, written in different colours
- by names of the children with 3 letters, 4 letters, 5 letters

If the children finish, ask them what rule they used. Praise them or help them. Give them another set of objects to sort.

5 CONCLUSION AND ASSESSMENT

Ask the children to display their work and let others see their groups.

Ask them to discuss the rules that they used. Ask them if they had any difficult decisions. Ask them if they had to change the rules.

Ask the children if there are other ways to organise the objects or cards, e.g. days of the week (coloured) could be organised by word length or colour.

Note if any children had problems and consider changing their partner in tomorrow's lesson.

TERM 4 WEEK 8 TUESDAY **REPRESENTING & INTERPRETING**

1 OBJECTIVE

Collect objects from the local environment and sort them into two groups using the children's own rules.

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

2 STARTER

Ask the children to sing, 'On my way to school today I met a little friend, we held hands and we walked/skipped/ran to school.' Ask them to hold hands in a circle while they sing and to walk/skip/run around in circles.

3 INTRODUCTION

Put the children into pairs.

Take the children outside. Ask them to collect stones, leaves, sticks, beads etc.

4 TEACHER AND STUDENT ACTIVITY

Remind the children about yesterday's lesson and tell them that they will play it again today. Tell them you will give them the rules today and you will change the rules sometimes.

Have some picture cards and extra objects nearby.

Give the children the first rule, to sort groups of objects or cards into colours, e.g. red apples, green apples. Let the pairs organise their objects. If they finish quickly, give them extra objects or picture cards to include.

Repeat with more rules,

- sort into short and long objects, e.g. short sticks, long sticks
- sort into 5s and 10s, e.g. 5 red apples, 10 green apples
- sort into groups of eating and non-eating objects, e.g. oranges for eating and stones for not eating

5 CONCLUSION AND ASSESSMENT

Ask the children if they had any difficult decisions. Ask them if they had to change where they put things when the rules changed.

Note if any children had problems and consider changing their partner in tomorrow's lesson.

TERM 4 WEEK 8 WEDNESDAY **REPRESENTING & INTERPRETING**

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

1 OBJECTIVE

Guess what rules have been used by another child to sort their objects.

2 STARTER

Play 'Simon says'.

3 INTRODUCTION

Sort some of the children into groups of different heights and let the children guess how they have been arranged.

Sort some other children by the length of their hair (or other rule) and ask the children to work out how they have been arranged.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to sort objects into two groups and let others guess the rule.

Put the children into pairs and sit two pairs together. Give each pair a single set of number cards, shapes, colours or name cards. Let the pairs sort the cards out according to a rule. Then ask them to look at the other pair's work and try to guess their rule, e.g.

- even and odd numbers
- squares, circles objects
- reds and blues or favourite colours
- names with 3 letters, 4 letters, 5 letters
- 6-year olds and 7-year olds

5 CONCLUSION AND ASSESSMENT

Did all pairs agree that objects had been sorted according to a rule? Were there any mistakes? How did they solve disagreements?

Discuss the rules for the groups of objects. Ask the children why they chose those rules.

Note if any children had problems and consider changing their partner in tomorrow's lesson.

TERM 4 WEEK 8 THURSDAY **REPRESENTING & INTERPRETING**

1 OBJECTIVE

Collect and sort objects found in the environment into groups using the children's own rules and draw the groups.

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

2 STARTER

Play 'I spy with my round eyes'.

3 INTRODUCTION

Put the children into pairs.

Take the children outside. Get them to collect stones, leaves, sticks, beads etc.

4 TEACHER AND STUDENT ACTIVITY

Remind the children about yesterday's lesson.

Tell each pair to sort their objects according to a rule that they agree upon. When they have finished, move the pairs around, but leave the objects. Tell the children to draw the objects in front of them and to try to work out the rule.

Move the pairs back and check if they guessed the rules of the other pairs. Look at the drawings and talk about the rules.

5 CONCLUSION AND ASSESSMENT

Ask the children if they found it difficult to work out the rules. Ask them what clues they got about the rules.

Ask the children if they drew the objects well, according to the rules.

Note any children who had difficulties and use the information when you prepare tomorrow's lesson.

TERM 4 WEEK 8 FRIDAY **REPRESENTING & INTERPRETING**

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

1 OBJECTIVE

Sort objects using rules given by the teacher and draw the groups.

2 STARTER

Sing a creative dance song.

3 INTRODUCTION

Show the children how to draw and colour objects according to their own rules, e.g. 3 white flowers or 2 red beetles.

4 TEACHER AND STUDENT ACTIVITY

Draw on the board, all mixed up,

4 black stones,
2 black pigs,
3 yellow bananas,
2 red strawberries,
2 red balloons (can be red buttons, lollies, nuts, apples, etc.).

Ask the children to draw the groups of objects on paper.

If children finish quickly, give them more groups to draw.

5 CONCLUSION AND ASSESSMENT

Ask the children to show their work. Try to guess the rules they have used and ask them how they grouped their drawings.

Ask the children if it was difficult to find the groups. Ask them what clues they got about the rules.

Note if any children had problems and record the information in the class assessment folders.

TERM 4 WEEK 9 MONDAY **REPRESENTING & INTERPRETING**

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

1 OBJECTIVE

Sort and group 2D and 3D shapes and draw the groups.

2 STARTER

Play 'I say, you say.' Explain the 'Take away 1.' rule, e.g. 'I say 1, you say 0', 'I say 3, you say 2.'

3 INTRODUCTION

Remind children of the 2D (flat) and 3D (solid) shapes they know, e.g. circle, triangle, rectangle, cylinder, cone, cuboid, sphere. Draw them on the board. Use several colours.

Compare the drawings to examples of real shapes.

4 TEACHER AND STUDENT ACTIVITY

Ask children to group the shapes and to draw the shapes.

Ask individual children how they grouped them, e.g. by colour, size, 2D/3D, other groupings.

Ask the children if they can you remember the names of the 2D shapes and 3D shapes.

5 CONCLUSION AND ASSESSMENT

As a class, discuss the different ways that children have grouped the shapes, e.g. by colour, size, 2D/3D, other groupings.

Ask the children to show their drawings of 2D shapes and 3D shapes. Ask them if they can remember the names of the objects.

Ask the children if they had to make difficult decisions. Ask them if they had to change the rules.

Note any children who had difficulties and use the information when you prepare tomorrow's lesson.

TERM 4 WEEK 9 TUESDAY **REPRESENTING & INTERPRETING**

1 OBJECTIVE

Sort and group heavy and light, long and short objects and draw the groups.

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

2 STARTER

Take the children outside and ask them to play a game by hopping from leaf to leaf while counting from 0 to 20 forwards and then while counting backwards.

3 INTRODUCTION

Show the class a selection of objects. Ask the children to help you sort them into heavy and light objects, long and short objects and bright and dark objects. Ask the children if there are other ways they could sort the objects.

4 TEACHER AND STUDENT ACTIVITY

Ask the children to draw the objects in groups. Tell them that they can choose one of the groupings you used in the introduction.

5 CONCLUSION AND ASSESSMENT

Ask the children to show their work. Praise the work or suggest ways to improve it.

Ask the children if objects can be long and heavy, short and heavy, light and long or light and short.

Note children who could not put objects into sensible groups and use the information when you prepare tomorrow's lesson.

1 OBJECTIVE

Sort numbers according to rules given by the teacher, e.g. even and odd, more or less than 10.

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

2 STARTER

Bring a bag into the classroom and put objects from yesterday inside. Hold one object inside the bag, describe it (long, heavy, etc.) and ask the children to guess what it is. Take the object out of the bag to show it to show the children. Repeat with other objects.

3 INTRODUCTION

Tell the children that numbers can also be grouped. Ask them what numbers they know and write the numbers on the board as they call them out.

Circle all the numbers that are more than 10. Ask the children what the circled numbers have in common.

Rub out the circles. Circle all the even numbers. Ask the children what the circled numbers have in common.

4 TEACHER AND STUDENT ACTIVITY

Put children into pairs. Give out sets of picture cards with odd numbers of objects and with even numbers of objects.

Ask the children to sort the cards into those with odd numbers of objects and those with even numbers. Observe and guide the children.

Ask the children to write numbers on paper, with odd numbers on the left, even numbers on the right.

5 CONCLUSION AND ASSESSMENT

Ask the children how else they could sort numbers, e.g. more than …, less than ….

Draw some numbers on the board: 2, 3, 5, 6, 8, 9, on the left, 1, 4, 7, on the right. What is the rule? (straight lines only, curves).

Note which children cannot count objects or group odd and even numbers and consider putting them with different partners in tomorrow's lesson.

TERM 4 WEEK 9 THURSDAY **REPRESENTING & INTERPRETING**

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

1 OBJECTIVE

Sort daily events according to rules given by the teacher, e.g. things done in the morning, things that happen at night-time.

2 STARTER

Sing the action song 'This is the way I brush my teeth' with the children.

3 INTRODUCTION

Ask the children what they did when they got out of the bed this morning, e.g. folded their bed sheet, ran to the river to wash, washed their face, looked for their uniform.

Ask them if they remember what else they may do today. Ask them to act out the activities.

4 TEACHER AND STUDENT ACTIVITY

Put children into pairs to talk about what things are done in the morning, what things are done in the afternoon and what things are done at night.

On the board, draw a table with spaces for things done in the morning, things done in the afternoon and things done at night.

After the pairs have talked about morning things, ask a pair to act out one of their things. Write it into the table. Repeat until you have several things for morning. Repeat for afternoon and night things.

5 CONCLUSION AND ASSESSMENT

Read through the table and ask the children to act out the entries. Ask them if any actions are done at more than one time, e.g. eating or brushing the teeth.

Note if any children had difficulty acting out activities. Record the information in the class assessment folders.

TERM 4 WEEK 9 FRIDAY **EVALUATION**

LESSON TOPIC: Represent and Interpret Patterns

STRAND: Data and Mathematical Relations

CONTENT STANDARD: P.4.2

1 OBJECTIVE

Tell the teacher their favorite topics in mathematics and explain why (this will help the teacher in her/his assessment).

2 STARTER

Sing the song, with actions,
'We are walking, walking,
we are walking to school today,
we are hopping, hopping,
we are hopping to school today …'

3 INTRODUCTION

Tell the children that it is the end of the year's work in mathematics. Ask them if they remember the things they have done this year.

Write the main topics on the board. They should include numbers (counting, adding, subtracting), shapes (angles, 2D and 3D), patterns (comparing and ordering), measurements (length, weight, money, time, capacity) and data (grouping things).

4 TEACHER AND STUDENT ACTIVITY

Write the main topics on paper and put them in different areas of the room. Remind the children of the activities that they did in lessons on the different topics.

Ask the children to go and stand next to the subject that they enjoyed most. Note the distribution of children.

With the children, fill in a table on the board, showing the favourite subjects in maths and the numbers of children that liked them.

5 CONCLUSION AND ASSESSMENT

Put the children into pairs. Ask the pairs to discuss why they liked a certain topic and then to share their thoughts with the class.

Ask the children to name their favourite topic and their least popular. Promise them that they will do lots more mathematics next year and will learn even more.

Note down the children's answers in the class assessment folders.

ASSESSMENT

Assessment should be carried out in each lesson. The teacher watches and listens to the children and judges how they are doing. This is called formative assessment. Elementary children do not usually have tests (summative assessment).

The Teacher Guide includes photocopiable assessment records for you to use. You need one for each child.

Keep the assessment records in the child's assessment folder and fill them out at the end of every week. If you have it, you should also put in any written or picture evidence of the child's learning and progress.

At the end of each term bring out the child's assessment folder and use it in the parent/teacher conference. When you pass the child on to their next teacher, sit down with them and discuss the child's progress and abilities using these sheets.

Assessment plan for each strand

The daily lesson plans have assessment tasks built in. At the end of each topic you must assess the children to make sure that they are meeting the standards. Report on the assessment tasks achieved by students at the end of Elementary Prep for each strand of study.

Strand1 : Number and Operation

Topics	By the end of EP the students should be able to	Assessment tasks
Counting	**P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120 **P.1.4** Students use their understanding of numbers to count objects by 10 as a unit for place value	**a.** Count 0 to 20 sets of objects **b.** Read number names from 0-20 **c.** Write number scripts from 0-20
Comparing and ordering	**P.1.1** Find an easier representation for counting and comparing the numbers of concrete objects up to 120 **P.1.2** Depending on the context, distinguish the number of objects and their position in order of objects with numbers, and explain the condition carefully to the others **P.1.3** Compare larger or smaller numbers on the number sequence and number line, and arrange in order	**a.** Compare sets of objects in numbers 0 to 20 **b.** Order number sets from 0 to 20 **c.** use first, second, third, last in numbers 0 to 20

Addition and Subtraction	**P.1.5** Understand the meaning of addition and calculate 1 digit numbers and 2 simple digit numbers **P.1.6** Understand the meaning of Subtraction and calculate 1 digit numbers and 2 simple digit numbers	**a.** Combine sets of objects between 1 and 10 **b.** Separate sets of objects between 1 and 10 **c.** Use number cards to combine and separate numbers

Strand 2: Quantities and Measurement

Topics	By the end of EP the students should be able to	Assessment tasks
Length	**P.2.1** Understand and compare quantities and produce arbitrary units of measurement	**a.** Measure length using the informal units **b.** Measure height using informal units **c.** Measure width of objects using informal units
Weight	**P.2.1** Understand and compare quantities and produce arbitrary units of measurement	**a.** Estimate the weight as in heavy or light **b.** Tell the weight of objects that weigh the same or different **c.** Order objects according to weight from light to heavy or vice versa
Capacity	**P.2.1** Understand and compare quantities and produce arbitrary units of measurement	**a.** measure the capacity of different containers and put them in order from smallest to biggest **b.** measure capacity of container with amount of water it can hold e.g. a bottle can hold one cup of water **c.** say how much each container can hold e.g. Small containers hold small amount,
Time	**P.2.2** Read o'clock time in relation to long and short hand on the clock face	**a.** Tell different parts of the day; morning, midday, afternoon, evening **b.** Estimate time for breakfast, lunch and dinner **c.** Tell time on clock face for 6 o'clock, 12 o'clock and 3 o' clock
Money	**P.2.1** Understand and compare quantities and produce arbitrary units of measurement	**a.** Tell the coins and notes b. Count out coins up to K1, K2, c. Count out money to buy items

Strand 3: Geometrical Figures

Topics	By the end of EP the students should be able to	Assessment tasks
Plane shapes (2D shapes)	**P.3.1** Understand the characteristics of geometrical figures through observation and composing using familiar shapes of objects	**a.** Group similar shapes and name them **b.** Match triangles, squares and circles **c.** Tell their differences
Angles & directions	**P.3.1** Understand the characteristics of geometrical figures through observation and composing using familiar shapes of objects	Follow simple instructions to move forward and backwards, to left and right
Solids (3D shapes)	**P.3.1** Understand the characteristics of geometrical figures through observation and composing using familiar shapes of objects	**a.** identify solids and describe them **b.** Group similar solids,

Strand 4: Data and Mathematical Relations

Topics	By the end of EP the students should be able to	Assessment tasks
Extending and Using Patterns	**P.4.1** Find patterns and recognise their structure in addition and subtraction.	**a.** Make patterns using colour and shape **b.** Arrange numbers in different ways to form a pattern **c.** Do odd number pattern **d.** Do even number pattern
Representing and interpreting data	**P.4.2** Explore and represent number of objects in form of picture and figures and interpret their patterns	**a.** Sort objects into two groups using their own criteria **b.** Collect objects from the local environment and sort them into two groups using their own criteria e.g. colour and shapes **c.** Guess what criteria has been used by another child to sort their objects **d.** Collect and sort objects found

Elementary Prep Term1 Sample Assessment Record

Year: ……Class: …… EP, Mathematics Assessment Record, Child's Name: ……...

Wk	Term 1	Notes –	A, P, N	Evidence
1	**Orientation**			Y/N
2	**Counting** Count the number of objects in a set, 1-20 or more or more. Say and use number in songs, rhymes and stories. Estimate the number of objects in a set, 1-20 or more			Y/N
3	**Comparing & Ordering** Compare and order sets of objects and numbers 1-20 or more			Y/N
4	**Addition and Subtraction** Combine and separate sets of objects 1-20 or more			Y/N
5	**Addition and Subtraction** Combine and separate sets of objects 1-20 or more			Y/N
6	**Counting** read and name numbers from 0 to 20 write numbers scripts from 0 to 20			Y/N
7	**Time** Order daily and weekly events Tell time using morning, lunch, afternoon, before, after			Y/N
8	**Money** Recognise notes up to K20 and coins up to K1.00			Y/N
9	**Comparing & Ordering** Compare and order sets of objects 1-20 or more Use vocabulary: first, second, third, last			Y/N

A = Achieved learning objectives for this week

P = partly achieved or achieved some of the learning objectives for the week

N = Not done, child did not follow this week's work

Elementary Prep Term 2 Sample Assessment Record

Year: …… Class: …… EP, Mathematics Assessment Record, Child's Name: ……....

Wk	Term 2	Notes –	A, P, N	Evidence
1	**Revision**			
2	**Counting** count common objects using number names in language and English			
3	**Comparing and ordering** Order sets of objects by number 1-20 or more or more, e.g. put aside in order 1 stone, 2 stones, 3 stones up to 20 stones			
4	**Extending Patterns** Recognize and complete simple patterns in color, shapes and sizes			
5	**Extending Patterns** Know that the same number of objects can be arranged in different ways.			
6	**Plane Shapes (2-D Shapes)** Identify and name circles, triangles and squares in their environment			
7	**Solids (3D shapes)** Select and sort solid shapes found in their environment			
8	**Weight** Compare light and heavy objects using 'lighter than' and 'heavier than'			
9	**Length** Measure height and length in non-standard ways			

A = Achieved learning objectives for this week

P = partly achieved or achieved some of the learning objectives for the week

N = Not done, child did not follow this week's work

Elementary Prep Term 3 Sample Assessment Record

Year: …… Class: …… EP, Mathematics Assessment Record, Child's Name: ……....

Wk	Term 3	Notes –	A, P, N	Evidence
1	**Revision**			
2	**Counting** Count the number of objects in a set, 1-20 or more or more Estimate the number of objects in a set, 1-20 or more			
3	**Addition & Subtraction** Solve simple oral and pictorial problems ,1-20 or more			
4	**Weight** Measure light and heavy objects using non-standard units. Compare light and heavy objects using 'lighter than' and 'heavier than'			
5	**Capacity** Compare and order different sizes of containers			
6	**Capacity** Estimate and compare how much each container can hold in non-standard units			
7	**Time** Read time in 1 hour intervals			
8	**Money** Do play activities to solve simple money problems			
9	**Addition and Subtraction** Combine and separate sets of objects 1-20 or more			

A = Achieved learning objectives for this week

P = partly achieved or achieved some of the learning objectives for the week

N = Not done, child did not follow this week's work

Elementary Prep Term 4 Sample Assessment Record

Year: ……Class: …… EP, Mathematics Assessment Record, Child's Name: ……

Wk	Term 4	Notes –	A, P, N	Evidence
1	**Revision**			
2	**Counting** count common objects using number names in language and English e.g in songs and rhymes			
3	**Comparing & Ordering** Put numbers on a number line 1 to 20 or more			
4	**Addition & Subtraction** Solve simple oral and pictorial problems ,1-20 or more			
5	**Length** Compare height and length using 'longer than', 'shorter than' and 'taller than'			
6	**Addition & Subtraction** Solve simple oral and pictorial problems ,1-20 or more			
7	**Angles and Directions** Give and follow simple moving and turning directions using forward, backward, sideways, up, down, left, right			
8	**Representing and interpreting data** Collect objects and sort them into groups			
9	**Representing and interpreting data** Collect objects and sort them into groups			

A = Achieved learning objectives for this week

P = partly achieved or achieved some of the learning objectives for the week

N = Not done, child did not follow this week's work

Reporting Sample

You may photocopy and use for each student in your class.

Name of school: ……...
Class Teacher: ……
Student Name: ……Male/female: ……

Year: …… Class: …… EP,

Rating of Assessment Tasks KEY FOR RATING: A- Excellent B. Good C partly achieved					
Strand: Number and Operation					
Counting	**Rating A,B,C**	**Comparing and ordering**	**Rating A,B,C**	**Addition & Subtraction**	**Rating A,B,C**
Count 0 to 20 sets of objects	A	Compare sets of objects in numbers 0 to 20	B	Combine sets of objects between 1 and 10	B
Read number names from 0 to 20	B	Order number sets from 0 to 20	A	Separate sets of objects between 1 and 10	A
Write number scripts from 0 to 20	A	Use first, second, third, last in numbers 0 to 20	A	Use number cards to combine and separate numbers	C
Strand: Quantities and Measurement					
Length		Weight		Capacity	
Measure length using the informal units		Estimate the weight as in heavy or light		measure the capacity of different containers and put them in order from smallest to biggest	
Measure height using informal units		Tell the weight of objects that weigh the same or different		measure capacity of container with amount of water it can hold e.g. a bottle can hold one cup of water	
Measure width of objects using informal units		Order objects according to weight from light to heavy or vice versa		say how much each container can hold e.g. Small containers hold small amount,	

Time		**Money**			
Tell different parts of the day; morning, mid-day, afternoon, evening		Tell the coins and notes			
Estimate time for breakfast, lunch and dinner		Count out coins up to K1, K2,			
Tell time on clock face for 6 o'clock, 12 o'clock and 3 o' clock		Count out money to buy items			
Strand: Geometrical Figures					
Plane shapes (2D shapes)		Angles & directions		Solids (3D shapes)	
Group similar shapes and name them		Follow simple instructions to move forward and backwards, to left and right		Identify solids and describe them	
Tell their differences					
Strand: Data and Mathematical Relations					
Extending Patterns		Representing and interpreting data			
Make patterns using colour and shape		Collect objects from the local environment and sort them into two groups using their own criteria e.g. colour and shapes			
Arrange numbers in different ways to form a pattern		Sort numbers according to criteria given by the teacher e.g. even and odd, more or less than 10,			
Do odd number pattern		Explain their favourite food etc			
Do even number pattern					

ASSESSMENT

Teachers

Comments.....

.....

.....

Signatures:

Student;.....Teacher .....Date:.....

Parent/ Guardian Comments.....

.....

Signatures:

Student:..... Parent/ Guardian .....

Date:.....

Note: Parent/ Guardian bring original to class teacher and gets head teacher to sign and stamp. Compile and pass copies; to Parent/ Guardian, and Elementary 1 teacher for records of the child's progress in the next year of learning for a child

Head Teacher signatures……School Stamp

GLOSSARY

Meanings of terms used for teacher to read, understand and use in teaching mathematics lessons

Term	Meaning
Addition	As in putting together or putting on of objects etc.
Area	Part or measurement of surface enclosed within a boundary, or extent of the surface of all or part of a solid. *E.g.* a piece of land for the school called the school area or boundary
Capacity	The quality or amount a container can hold and contain
Circle	A ring all around with same measurement of radius from the centre/mid-point
Cone	Pointed object with round base. *E.g.* ice-cream
Currency	Money used by the country to buy and sell. For example, Papua New Guinea coins and paper money in Toeas and Kinas to buy and sell
Data	Collection of objects or numbers that give information about population etc. *for example,* number of students in a school.
Digit	Any single number from 0 to 9. *For example* number 10 has two digits
Dimensional shapes	Shapes that have height and length (2D shapes) and height , length and width (3D shapes)
Division	Grouping objects and symbols into groups or numbers
Estimate	Make guesses, predictions and calculations with appropriate judgement to solve problems
Geometric shapes	Patterns of shapes such as oblongs, triangles and squares formed by joining straight lines and with corners.
Geometry	Study of angles and shapes that are formed by relating to lines, surfaces and solids such as triangles , cubes and circles
hour	Time measurement for hours or duration of time
Informal units	Non- standard units as arm spans, paces, sticks, ropes used for measuring in the daily activities of different communities e.g. using leg space to measure the length of a house.
Interpret	To work out and say in own words, the meaning and understanding of pictures and symbols.
Minute	Clock face or time measurement operation shown by the long hand showing 60 minute cycle for hourly routine that is 6o minutes per hour.
Multiplication	a mathematical operation which has a x symbol , that can be shown by adding integers repeatedly
Pattern	Repeated designs etc. as in for example weaving a basket or billum
Rectangle	Four (4) straight sided figures with lines that meet at 90 degree angles and with 2 opposite sides equal.
Sphere	An object similar to ball, round solid figure, three- dimensional surface that has distance from all points to the centre point. E.g. globe or earth
Seconds	Time in 1 minute that is 60 seconds per minute
Sorting	Classification or grouping into sets or subsets according to feature of objects or number groups e.g. 10 in 1 set
Subtraction	As in taking away or decreasing an object or symbol
Triangle	Three (3) straight sided figure with 2 lines that meet at 90 degree angle

RESOURCES

Word list and resources

Check each lesson for the resources that are needed and prepare them in advance before you teach the lessons. Also use the correct mathematics words and terms as listed below. There must be a display of correctly spelt words in the classroom.

Elementary Prep Term 1

Word List	Resources
Zero, one, two, three, four, five, six, seven, eight, nine, teneleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty First, second, third, last. even, odd pairs, count, group, set forwards, backwards, up, down add, subtract same, similar, different more, less compare, more than, less than, small, big make, jumps, claps, steps, fingers, objects, language Separate, draw, line, blank, dot, term, and combine, throughShapes. Circles, triangles, squares, rectangles, diamonds arrange, match, sort Day, night, stars, sun, moon, bells Morning, midday, afternoon, breakfast, lunchtime, dinnertime, bedtime, time Favourite Midnight, o'clock, sunrise, sunset Kina, toea, notes, coins,	Stones, marbles, sticks, shells, seeds, bottle tops, beads (enough for 20 per child) Flash cards with objects and numbers between 0 to 20 Cards with English and Tok ples words for 0-20 Washing pegs, Washing line/string, prepared various coloured shapes for children to string together 5 shapes different sized jars, empty tins and bottles different sized boxes number flash cards for each pair/group Blank card, blank paper, pens, pencils, biros, paint and brushes Flashcards with different sized triangles, circles, rectangles Flash cards with different cubes, spheres, cones and cylinders (names spelt correctly) Flashcards with the words and drawings of the sun, the moon, the stars Pictures of activities that happen at different parts of the day on chart and flash cards A big clock face for the teacher, lots of small clock faces for the children Examples of all coins and notes up to K20. Sets of cardboard/paper coins and notes for the class. Items to buy in the classroom shop. Labels to price the items.

Elementary Prep Term 2

New Word List	New Resources
Size Order, before, after Follow, patterns, repeat, copy, continue Rope, string, drum, tins, rattles Colour –red, black, blue, yellow, design, repeat, re-peated, bilum, mat, basket, tapa cloth bilum, mat, basket etc Repeated patterns Round, roll, slide sun, tyre, plate, cup, saucepan lid, round-about (road) 2d, 3d, Corner, Sides, Flat Edge, cone, Cube Inside space, Sphere, Round, Sphere Light, lighter, heavier, weight, heaviest, lightest, heavy Big, bigger, biggest, small, smaller, smallest Tall, taller, tallest, short, shorter, shortest Hand span, measure, length, height, width	Books on /about number & number rhymes. various shapes for children to string together 2D and 3D shapes, simple 3d shapes from objects found in the environment Rope, string, drum, tins, rattles , barks, sand colours: red, blue, yellow, green drawing paper, variety of colours of wool card shaped as; triangle, circle, rectangle cards shaped as; straight, crooked, long short big small lots of things with patterns like bilum, basket, mat, coconut shell, bamboo, tapa cloth, laplap, leaves, flowers etc. cubes, boxes bottle tops counters, blocks, balls, tin cans, cereal packets, building blocks, various balls Variety of sample food items 7cm sticks/ropes/string, 70cm sticks/ropes/string

RESOURCES

Elementary Prep Term 3

New word list	New Resources
arrange, total, subtract, subtraction, left empty, full left, right container/bottle, pour Litre, half litre, half Minute, hour, clock face, clock hand Buy, sell +, -, =, equals, plus, minus, number sentence Sequence, missing	jars, empty tins, plastic bags beam balances – enough for one between two and one large one for the teacher fruit and vegetables found in the community plastic bottles, clear containers for water (½L, 1L, 2L, 5L and more), buckets for water, measuring cylinders or jugs

Elementary Prep Term 4

New word list	New Resources
altogether instructions sorting, groups, rules, decisions bright, dark, lines, curves	string, various coloured shapes for children to string together 5 shapes Paper and coloured pencils potatoes or kaukau to make prints, paint poster with a grid showing a collection of different symbols

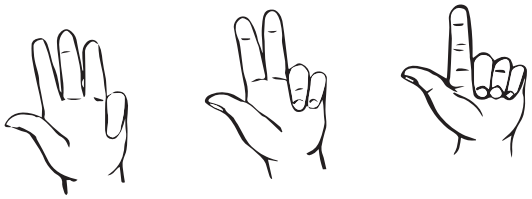
Songs

Mathematical songs that can be used during lessons.

10 Ripe pawpaws

10 ripe pawpaws hanging on the tree,
10 ripe pawpaws hanging on the tree,
1 ripe pawpaw has accidently fallen,
9 ripe pawpaws hanging on the tree
(Continue this song to no ripe pawpaw hanging on the tree)

One little, two little fingers…



One little, two little fingers, three little fingers,
Four little, Five little fingers, six little fingers,
Seven little, eight little fingers, nine little fingers,
I have 10 little fingers on my hands

I hear some toeas dropping (Tune: Hear the toes dropping)

I hear some toeas dropping, listen while they drop
Every coin is different in size, shape and number
Dropping. dropping, dropping,
Hear the sounds they make
Every coin is different in size, shape and number

Ten green bottles

10 green bottles hanging on the wall
10 green bottles hanging on the wall
And if one green bottle should accidentally fall
There'll be 9 green bottles hanging on the wall
(Continue this song to no green bottles hanging on the wall)

I have some coins

I have some toeas In my pocket, In my pocket. In my pocket
I have some toeas they count up to one Kina
(Continue with toeas in my billum and toeas in my wallet)

There were 10 in the bed

There were 10 in the bed and the little one said
Roll over, roll over.
So they all rolled over and one fell out
There were 9 in the bed and the little one said,
Roll over, roll over
(Continue this song to no children in the bed)

This is the way I brush my teeth

This is the way I brush my teeth, brush my teeth, brush my teeth, (with all children and teacher doing the action, miming brushing teeth)
This is the way I brush my teeth, brush my teeth in the morning,
This is the way I walk to school, walk to school, walk to school (all miming walking)
This is the way I walk to school, walk to school in the morning.
Repeat with different activities and actions

On my way to school today I met a little friend

On my way to school today I met a little friend ,
we hold our hands together and we walk to school
(children hold hands in a circle and sing the song while walking around in circles)
On my way to school today I met a little friend ,
we hold our hands together and we skip to school
(children hold hands in a circle and sing the song while skipping around in circles)
(Repeat with other actions)

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