



MINISTRY OF EDUCATION MALAYSIA

Integrated Curriculum for Primary Schools

Curriculum Specifications

MATHEMATICS YEAR 1



Curriculum Development Centre
Ministry of Education Malaysia
2002

Topic: WHOLE NUMBERS

Learning Area: Numbers 0 to 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Say and use the number names in familiar contexts.</p>	<ul style="list-style-type: none"> • Pupils say numerals familiar to them: eg. their age, house number, bus number, page number, numbers on telephone and clock face. • Teacher represents (models) each number using objects in the classroom: eg: 1 book, 4 chairs, 1 nose and 2 eyes. • Pupils listen and repeat each number after teacher through rhymes, songs, and stories. For example: Five Little Ducks and The Three Bears. • Pupils recite the sequence; One, two ... nine through rhymes, songs and stories. 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Say the number names 1 to 9. ii. Recognise numerals 1 to 9. iii. Count a group of objects 1 to 9. 	<p>Emphasise equal and unequal quantities of objects.</p> <p>Numbers should be introduced as a representation of quantity of objects.</p> <p>Pupils should count systematically to keep track of the count.</p> <p>Oversome difficulties and recognise recitation errors.</p> <p>Count a collection of objects in different arrangements.</p>	<p>number numerals count one two three four five six seven eight nine say How many? count in ones things group sing</p>


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<p><i>Pupils will be taught to:</i></p>	<ul style="list-style-type: none">• Pupils recite the sequence; One, two ... nine through rhymes, songs and stories.• Pupils count objects in the classroom.• Pupils count in other contexts, such as clapping sounds or hopping movements.	<p><i>Pupils will be able to:</i></p>	<p>The purpose of counting is to tell how many there are.</p> <p>The last number name spoken is the answer to questions such as “how many are there?”</p> <p>Check for accuracy.</p>	

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LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>2. Read and write numbers from 1 to 9.</p>	<ul style="list-style-type: none"> • Pupils write numbers “in the air”, using sand, playdough, tracing with finger cut-out numerals and by joining dots. • Pupils write numerals using the correct technique. • Pupils sing number rhymes, songs, and read stories. • Pupils read and spell number words one to nine. • Pupils match numerals with number words. 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Write numerals 1 to 9. ii. Read number words one to nine. iii. Write number words one to nine. 	<p>Pupils should begin writing numerals by tracing the digits.</p> <p>Technique of writing numerals 1 to 9.</p>  <p>Emphasise the correct technique of writing numerals.</p>	

Topic: WHOLE NUMBERS

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LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>3. Say and use the number names in order.</p>	<ul style="list-style-type: none"> • On a number track marked 1 to 9, pupils skip, hop or jump to: <ul style="list-style-type: none"> - count on in ones; - count back in ones; • Pupils respond to questions such as: What number comes after 4? What number comes before 7? What number comes next? • Look at and point to a number track. <ul style="list-style-type: none"> - Say aloud every other number, starting at one, starting at two ... 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Arrange numbers 1 to 9: <ul style="list-style-type: none"> a. count on in ones. b. count back in ones. 	<p>Arrange in order a complete set of numbers (first objects, then dot patterns, then numerals): from 1 to about 5, then to 10.</p>	<p>number count one two three four five six seven eight nine How many? count on count back count on in ones count back in ones after before next in order group</p>

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Learning Area: Numbers 0 to 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p>	<ul style="list-style-type: none">Put in order, smallest first, a set of numbers 1 to 9, with three or four of the numbers removed. Which numbers are missing? <p><input type="text" value="3"/> <input type="text" value="7"/> <input type="text" value="5"/> <input type="text" value="8"/> <input type="text" value="2"/></p>	<p><i>Pupils will be able to:</i></p>		


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Learning Area: Numbers 0 to 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>4. Read and write numbers from 0 to 10.</p>	<ul style="list-style-type: none"> • Pupils listen to and say/recite number rhymes, songs and stories. e.g: Ten Green Bottles, and One, two ... • Pupils tell the number of things that obviously are not in the classroom. e.g: How many cars are there in this room? How many tigers? etc. • Pupils to count fingers or other objects to 10. • Pupils recite the sequence zero, one ... ten. 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Say the number names 0 and 10. ii. Recognise 0 and 10 in counting. iii. Count a group of objects to 10. 	<p>Pupils to understand the idea that a group with nothing is called zero.</p> <p>Pupils to recognise “zero” as the cardinal number associated with “none”, through stories and when counting back.</p>	<p>number count one two three four five six seven eight nine ten zero all gone nothing no more say How many? number words match</p>

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Learning Area: Numbers 0 to 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p>	<ul style="list-style-type: none">• Pupils write numerals correctly, by tracing from top to bottom in a continuous line where possible, first 0 and then 10.• Pupils read and spell number words zero to ten.• Pupils write number words zero to ten.	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none">iv. Write numerals 0 and 10.v. Read number words zero to ten.vi. Write number words zero to ten.	<p>Technique of writing the numeral 0.</p>  <p>Emphasise the correct technique of writing numerals.</p>	

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Learning Area: Numbers 0 to 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>5. Understand and use the vocabulary of comparing and arranging numbers or quantities.</p>	<ul style="list-style-type: none"> • Pupils count on in ones from 0 to 10. <div data-bbox="439 458 852 512" style="border: 1px solid black; padding: 2px; text-align: center;">0 1 2 3 4 5 6 7 8 9 10</div> • Pupils count back in ones from 10 to 0. <div data-bbox="439 655 852 709" style="border: 1px solid black; padding: 2px; text-align: center;">10 9 8 7 6 5 4 3 2 1 0</div> • Pupils compare two numbers using concrete objects such as books, rulers, Cuisenaire rods or connecting blocks. e.g. <div data-bbox="535 973 700 1143" style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 30px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 30px; margin: 2px;"></div> </div> 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Arrange numbers from 0 to 10; <ol style="list-style-type: none"> a. count on in ones. b. count back in ones. c. count on from a given number. d. count back to a given number. ii. Compare two numbers and say which is more or less. iii. Identify one more or one less. 	<p>Arrange in order a complete set of numbers (first objects, then dot patterns, then numerals): from 0 to 10.</p> <p>Find out by counting which of the two groups has more or fewer objects.</p> <p>Know that a number following another number in the counting sequence is larger.</p>	<p>few more less same same as not the same before after next between small smaller smallest large larger largest arrange order put put away</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers 0 to 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p>	<ul style="list-style-type: none">• Pupils respond to questions such as:<ol style="list-style-type: none">a. Which is more?b. Which is less?c. Which is 1 more?d. Which is 1 less?e. Which is equalf. Which is not equal?	<p><i>Pupils will be able to:</i></p>		

Topic: WHOLE NUMBERS

Learning Area: Addition with the Highest Total of 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Use the vocabulary involved in addition with the highest total of 10.</p>	<ul style="list-style-type: none"> • Model concept of addition using concrete and manipulative materials. • Pupils repeat after teacher: <i>5 and 1 more</i> is 6; <i>5 and 1</i> is 6; <i>5 plus 1</i> is 6; <i>5 add 1</i> is 6. 	<p><i>Pupils will be able to:</i></p> <p>i. Find one more than a number from 1 to 9.</p>	<p>Addition is combining sets to make a total.</p> <p>Introduce the symbols of addition '+' and equals '=' to record calculations.</p> <p>Relate '+' to: <i>and; plus; add; and more.</i></p> <p>Adding zero to a number leaves the number unchanged.</p>	<p>one more add plus sum equals number sentence</p>

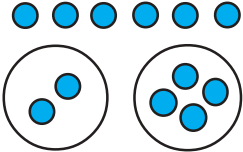
Topic: WHOLE NUMBERS

Learning Area: Addition with the Highest Total of 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>2. Understand addition as combining two groups of objects.</p>	<ul style="list-style-type: none"> • Write the number sentence for addition: e.g. $5 + 1 = 6$ Repeat with different numbers. • Pupils say how many there are by counting all objects. e.g. Combine a group of 3 cakes with a group of 4 cakes to get 7 cakes. $3 \text{ cakes} + 4 \text{ cakes} = 7 \text{ cakes}$ 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> Find the total of two numbers. Write number sentences for addition. 	<p>Find totals by counting all objects and by counting on.</p> <p>Read number sentence, $2 + 1 = 3$ as “two plus one equals three” or “two plus one is equal to three”.</p>	<p>one more add plus total sum equals number sentence</p>

Topic: WHOLE NUMBERS

Learning Area: Addition with the Highest Total of 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p>	<ul style="list-style-type: none"> • Pupils find total by using fingers or other objects. • Pupils make all possible combinations of a specified number using chips or other objects. e.g. 6  <p>Try with other numbers.</p> <ul style="list-style-type: none"> • Pupils list all possible combinations of two numbers that equal to a given total. e.g. Total is 8 $0 + 8 = 8$ $1 + 7 = 8$ $2 + 6 = 8$ $3 + 5 = 8$ $4 + 4 = 8$	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> iii. State all possible pairs of numbers that total up to a given number. iv. Recall rapidly the total of two numbers. 	<p>Emphasise mental calculation.</p>	<p>plus add equals total number sentence combinations recall rapidly mental calculation</p>

Topic: WHOLE NUMBERS

Learning Area: Addition with the Highest Total of 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>3. Use and apply knowledge of addition in real life.</p>	<ul style="list-style-type: none"> • Pupils recall all possible pairs of numbers to find a total. • Pupils solve problems by simulating or modelling the situation. e.g: I have 2 brothers and 4 sisters. How many ice-creams do I have to buy for them? $2 + 4 = \square$ e.g Siti buys 5 eggs. How many more eggs must she buy to make 9? $2 + \square = 9$ e.g How many must be added to three to make eight? $\square + 3 = 8$ 	<p><i>Pupils will be able to:</i></p> <p>i. Solve simple problems in real life situations.</p>	<p>Use and apply knowledge of addition in a variety of contexts including real life.</p> <p>Pupils must know by heart all possible combinations of two numbers that total up to 10.</p> <p>Addition involves basic facts with the highest total of 10.</p> <p>Select problems according to pupils' ability and proficiency in language.</p>	<p>plus add total sum of How many altogether?</p>

Topic: WHOLE NUMBERS

Learning Area: Subtraction within the Range of 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Use the vocabulary involved in subtraction of numbers 0 to 10.</p> <p>2. Understand subtraction as “take away”.</p>	<ul style="list-style-type: none"> Model concept of subtraction using concrete and manipulative materials. Pupils take out 1 bead at a time from a group of 10 beads to find the balance. e.g. $10 - 1 = 9$ $9 - 1 = 8$ $8 - 1 = 7$ $7 - 1 = 6 \dots$ Pupils write number sentences. e.g. There are 6 books. Devi takes away 2 books. How many books are left? $6 - 2 = \square$ 	<p><i>Pupils will be able to:</i></p> <p>i. Find one less than a number.</p> <p>i. Write number sentences for subtraction.</p>	<p>Relate subtraction to “taking-away” and counting how many are left.</p> <p>Introduce the symbols of subtraction ‘-’ and equals ‘=’ to record calculations.</p> <p>Relate ‘-’ to: <i>take away;</i> <i>less than;</i> and <i>what is left.</i></p> <p>Subtracting zero from a number leaves the number unchanged.</p>	<p>subtract take away take out What is left?</p>

Topic: WHOLE NUMBERS

Learning Area: Subtraction within the Range of 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p>	<p>e.g. I have 8 sweets. I give Chan 3 sweets. How many sweets do I have left?</p> <p>$8 - 3 = \square$</p>	<p><i>Pupils will be able to:</i></p>	<p>Read number sentence, $5 - 3 = 2$ as “five minus three equals two” or “five minus three is equal to two”.</p>	

Topic: WHOLE NUMBERS

Learning Area: Subtraction within the Range of 10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>3. Use and apply knowledge of subtraction in real life.</p>	<ul style="list-style-type: none">• Pupils recall all possible pairs of numbers to find a difference.• Pupils solve problems by simulating or modelling the situation. e.g. My father's car has 4 tyres. One tyre is missing. How many tyres are left? $4 - 1 = \square$	<p><i>Pupils will be able to:</i></p> <p>i. Solve simple problems in real life situations.</p>	<p>Use and apply knowledge of subtraction in a variety of contexts including real life.</p> <p>Select problems according to pupils' ability and proficiency in language.</p>	<p>take away remove How many left?</p>

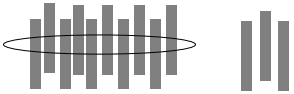
Topic: WHOLE NUMBERS

Learning Area: Numbers to 20

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Say and use the number names in familiar contexts.</p> <p>2. Read and write numbers from 11 to 20.</p>	<ul style="list-style-type: none"> • Pupils recite the sequence eleven, twelve, ... twenty. • Pupils recognise numerals they see on flash cards. • Pupils count objects in the classroom or outside. e.g. chairs, leaves, flowers ... • Pupils count on and back in ones using number ladder or number line up to 20. • Pupils match numerals with number words up to 20. • Computer based teaching and learning activities are encouraged. 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Say the number names 11 to 20. ii. Recognise numerals 11 to 20. iii. Count a group of objects 11 to 20. i. Write numerals 11 to 20. ii. Read number words eleven to twenty. iii. Write number words eleven to twenty. 	<p>Numbers should be introduced as a representation of quantity of objects.</p> <p>Overcome difficulties and recognise recitation errors.</p>	<p>number count eleven twelve thirteen fourteen fifteen sixteen seventeen eighteen nineteen twenty say How many? group ones tens number ladder number line</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers to 20

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>3. Know what each digit in a number represents.</p>	<ul style="list-style-type: none"> • Represent 13 with objects.  <ul style="list-style-type: none"> • Pupils say what each digit in a number represents. e.g. 13 Digit 1 in 13 represents 10 and 3 represents 3. • Ask Pupils: Say which number is the same as: One ten and seven ones (17); One ten and 1 one (11); Two tens and no ones (20). 	<p><i>Pupils will be able to:</i></p> <p>i. Say what each digit in a number represents.</p>	<p>Emphasise the representation of each digit in numbers.</p>	<p>number count eleven twelve thirteen fourteen fifteen sixteen seventeen eighteen nineteen twenty say How many? group ones tens</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers to 20

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>4. Say and use the number names in order.</p>	<ul style="list-style-type: none"> • Pupils count on in ones: <i>eleven, twelve, ... twenty.</i> • Pupils count back in ones; <i>twenty, nineteen, eighteen, ... eleven.</i> • Pupils count on from a given number. e.g. Start with <i>twelve</i>. Hold it in your head. Count on to <i>fifteen</i>. <i>Twelve, thirteen, fourteen, fifteen.</i> • Pupils count back from a given number. e.g. Count back four numbers from <i>sixteen</i>. <i>Fifteen, fourteen, thirteen, twelve.</i> 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Arrange numbers 11 to 20; <ul style="list-style-type: none"> a. count on in ones. b. count back in ones. c. count on from a given number. d. count back to a given number. 	<p>Encourage pupils to say the numbers correctly.</p>	<p>count on count back count in ones hold it in your head</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers to 100

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Say and use the number names in familiar contexts.</p>	<ul style="list-style-type: none"> • Pupils recite the number sequence to 100. • Pupils recognise numerals they see on flash cards. • Pupils count objects in tens and ones using multi based blocks and Cuisenaire rods. • Pupils count on and back in ones using the hundred grid, number ladder or number line up to 100. 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Say the number names to 100. ii. Recognise numerals to 100. iii. Count a group of objects to 100. 	<p>Encourage pupils to pronounce the numbers correctly. For example: <i>eighty-five</i></p>	<p>ten twenty thirty forty fifty sixty seventy eighty ninety one hundred twenty-one, twenty-two ... one hundred thirty-one, thirty-two ... one hundred forty-one, forty-two ... one hundred fifty-one, fifty-two ... one hundred</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers to 100

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>2 Read and write numbers to 100.</p>	<ul style="list-style-type: none"> • Pupils match numerals with number words up to 100. • Computer based teaching and learning activities are encouraged. 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Write numerals to 100. ii. Read number words to one hundred. iii. Write number words to one hundred. 	<p>Check on pronunciation of number names.</p> <p>Overcome difficulties in spelling and check for accuracy.</p>	<p>sixty-one, sixty-two ... one hundred seventy-one, seventy-two ... one hundred eighty-one, eighty- two ... one hundred ninety-one, ninety- two ... one hundred Cuisenaire rods hundred grid missing number</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers to 100

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>3. Say and use the number names in order.</p>	<ul style="list-style-type: none"> • Pupils count on and count back in ones using objects such as ice-cream sticks, straws, hundred grid or diagrams. • Pupils count on and count back in tens using objects, Cuisenaire rods, multi based blocks or hundred grid. • Pupils count on and count back in tens from a given number using objects, Cuisenaire rods, multi based blocks or hundred grid. e.g. Count on in tens from 1; 1, 11, 21 ... 91 e.g. Count back in tens from 88; and stop at 38; 88, 78 ... 38 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Arrange numbers to 100; <ul style="list-style-type: none"> a. count on in ones to 100. b. count back in ones from 100. c. count on in tens from 0. d. count back in tens from 100. e. count on and count back in tens from a given number. 	<p>Encourage Pupils to say the numbers correctly.</p>	<p>count on count back count in ones hold it in your head</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers to 100

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<i>Pupils will be taught to:</i>	<ul style="list-style-type: none">• Fill in the missing numbers on a hundred grid or number line.• Complete series of numbers.	<i>Pupils will be able to:</i>		


Topic: WHOLE NUMBERS

Learning Area: Numbers to 100

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>4. Understand and use ordinal numbers in different contexts.</p>	<ul style="list-style-type: none"> • Teacher introduces ordinal numbers through activities, such as: <ol style="list-style-type: none"> a. 10 pupils to line up in a straight line. Each pupil says his number: One, two ... ten. The pupil who says 'one' is the first in the line. Repeat with the second to tenth pupil. b. Order winners in a running race from the first to tenth place. c. Order brothers or/and sisters in the family. 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Say ordinal numbers from first to tenth. ii. Use ordinal numbers in different contexts. 	<p>Pupils to understand and use in practical contexts ordinal numbers to denote position.</p> <p>Emphasise the relationship between cardinal and ordinal numbers up to 'tenth'.</p>	<p>arrange order first second third fourth fifth sixth seventh eighth ninth tenth last cardinal ordinal</p>

Topic: WHOLE NUMBERS

Learning Area: Numbers to 100

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p>	<ul style="list-style-type: none">• Pupils to use ordinal numbers in different contexts. e.g. Find the seventh page of your story book? Whose desk is ninth in this row?e.g. What is the number of the third house from the right? 	<p><i>Pupils will be able to:</i></p>		

Topic: WHOLE NUMBERS

Learning Area: Addition with the Highest Total of 18

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Use the vocabulary involved in addition</p> <p>2. Understand addition as combining two groups of objects.</p>	<ul style="list-style-type: none"> • Model concept of addition using concrete and manipulative materials. • Pupils answer to oral questions in many ways. e.g. 1 more than 10 is ___. ___ is 1 more than 14. • Pupils make all possible combinations of two groups of objects to make a total of up to 18. e.g. 8 bags + 4 bags = 12 bags 6 balls + 5 balls = 11 balls • Write the number sentence for addition: e.g. $8 + 7 = 15$ Repeat with different numbers. 	<p><i>Pupils will be able to:</i></p> <p>i. Find one more than a number.</p> <p>i. Find total of two numbers.</p> <p>ii. Write number sentences for addition.</p>	<p>Addition can be done in any order.</p> <p>Adding zero to a number leaves the number unchanged.</p> <p>Find totals by counting all objects and by counting on.</p>	<p>add plus one more total groups recall basic facts</p>

Topic: WHOLE NUMBERS

Learning Area: Addition with the Highest Total of 18

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>3. Know by heart basic facts of addition.</p> <p>4. Use and apply knowledge of addition in real life.</p>	<ul style="list-style-type: none"> • Pupils list all combinations of two numbers within basic facts. • Activities such as using flash cards and saying aloud can be carried out. • Pupils recall all pairs of numbers that give totals up to 18. • Pupils solve problems by simulating or modelling the situation. e.g. Abu has 8 balloons and Osu has 6. How many balloons are there altogether? 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Recall rapidly basic facts of addition. i. Solve simple problems in real life situations. 	<p>Emphasise mental calculation</p> <p>Use and apply knowledge of addition in a variety of contexts including real life.</p> <p>Select problems according to pupils' ability and proficiency in language.</p>	<p>add plus one more total altogether groups recall basic facts</p>

Topic: WHOLE NUMBERS

Learning Area: Subtraction within the Range of 18

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Use the vocabulary involved in subtraction.</p> <p>2. Understand subtraction as “take away” or “difference” between two groups of objects.</p>	<ul style="list-style-type: none"> • Model concept of subtraction using concrete and manipulative materials. • Pupils answer rapidly to oral questions in many ways. e.g. 14 is 1 less than ___. 1 less than 13 is ___. • Pupils find the difference between two groups of objects. • Pupils find all possible pairs of numbers for a given difference. e.g. $\bigcirc - \bigcirc = 2$ $\bigcirc - \bigcirc = 5$ 	<p><i>Pupils will be able to:</i></p> <p>i. Find one less than a number.</p> <p>i. Find the difference between two numbers.</p> <p>ii. Write number sentences for subtraction.</p>	<p>Relate subtraction to:</p> <ul style="list-style-type: none"> - taking-away; - counting how many are left. <p>Relate the symbol ‘-’ to: <i>remove, take away, less and what is left.</i></p> <p>Subtracting zero from a number leaves the number unchanged.</p>	<p>subtract take away take out minus difference balance How many left? What is left?</p>

Topic: WHOLE NUMBERS

Learning Area: Subtraction within the Range of 18

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>3. Know by heart basic facts of subtraction.</p>	<ul style="list-style-type: none"> • Pupils list all combinations of two numbers within basic facts. • Activities such as using flash cards and saying aloud can be carried out. • Pupils list all possible pairs of numbers for a given difference. e.g. Difference is 3 $3 - 0 = 3$ $4 - 1 = 3$ $5 - 2 = 3$ $6 - 3 = 3$ $7 - 4 = 3$ $8 - 5 = 3$ $9 - 6 = 3$ $10 - 7 = 3$ 	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none"> i. Recall rapidly basic facts of subtraction. ii. State all possible pairs of numbers with a difference equals to a given number. iii. Recall rapidly the difference of two numbers. 	<p>Find the difference by counting up to and counting back from the larger number.</p> <p>Emphasise mental calculation.</p> <p>Pupils must know by heart all possible pairs of numbers for a given difference.</p> <p>Emphasise mental calculation.</p>	<p>pair of numbers difference state equals recall rapidly mental calculation</p>

Topic: WHOLE NUMBERS

Learning Area: Subtraction within the Range of 18

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>4. Use and apply knowledge of subtraction in real life.</p>	<ul style="list-style-type: none"> • Pupils recall basic facts of subtraction. • Pupils solve problems by simulating or modelling the situation. e.g. Ajit has 18 oranges. He gives away 9. How many oranges are left? e.g. There are 9 chairs. Pupils take away a few chairs so that there are 5 chairs left. How many chairs were taken away? $9 - \square = 5$ <p>e.g. Think of a number and take away 3. The answer is 6, what is the number?</p> $\square - 3 = 6$	<p><i>Pupils will be able to:</i></p> <p>i. Solve simple problems in real life situations.</p>	<p>Use and apply knowledge of subtraction in a variety of contexts including real life.</p> <p>Select problems according to pupils' ability and proficiency in language.</p>	<p>subtract take away take out minus difference balance How many left? what is left?</p>

Topic: MONEY

Learning Area: Money to RM10

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Understand and use the vocabulary related to money.</p>	<ul style="list-style-type: none"> • Pupils trace, colour and exchange coins. • Pupils use sample coins and notes to find total value of money. • Pupils do simulation of real life situation in the classroom such as: <ul style="list-style-type: none"> - classroom shop; - school canteen; and - buying grocery. 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Recognise coins and notes of Malaysian currency. ii. Represent the value of money in 'RM' and 'sen'. iii. Exchange <ol style="list-style-type: none"> a. coins up to RM1; and b. notes up to RM10. iv. Add and subtract <ol style="list-style-type: none"> a. coins up to RM1; and b. notes up to RM10. v. Solve simple problems involving money in real life situations. 	<p>Explain ringgit symbol as 'RM' and sen symbol as 'sen' and pronounce it correctly.</p> <p>e.g:</p> <ol style="list-style-type: none"> a. 40 sen pronounce as <i>forty sen</i>; b. RM2 pronounce as <i>two ringgit</i>, and c. RM3.45 pronounce as <i>three ringgit and forty-five sen</i>. <p>Exchange coins up to RM1 using only 1 sen, 5 sen, 10 sen, 20 sen and 50 sen and in any combination.</p>	<p>how many how much buy sell sort the same price cost pay coins notes total exchange value</p>



Topic: TIME

Learning Area: Introduction to Time

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Understand and use the vocabulary related to time.</p>	<ul style="list-style-type: none"> • Pupils colour pictures of events in a day. • Pupils tell what they do in a day. • Discuss events on each day of the week. • Sing related songs. • Pupils tell special events in Malaysia and when they are celebrated. e.g. Teacher's Day Merdeka Day New Year Hari Raya Deepavali Harvest Day 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Say time of the day correctly. ii. Say in sequence events of the day. iii. Name the days of the week in sequence. 	<p>Time of the day is morning, noon, afternoon, evening, night and midnight.</p> <p>Events of the day such as brushing teeth, breakfast, lunch, dinner, etc.</p> <p>Use analogue and digital clocks.</p> <p>Emphasise the difference between the hour hand and the minute hand.</p>	<p>time morning, noon afternoon, evening, night, midnight wake-up bath brush teeth breakfast lunch dinner go to school today, tomorrow yesterday, day after, day before Monday Tuesday Wednesday Thursday Friday Saturday Sunday</p>

Topic: TIME

Learning Area: Introduction to Time

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p>	<ul style="list-style-type: none">• Pupils tell and write time. e.g.  <p>7 o'clock (seven o'clock)</p>  <p>10 o'clock (ten o'clock)</p>	<p><i>Pupils will be able to:</i></p> <ul style="list-style-type: none">iv. Name the months of the year in sequence.v. Read and write time to the hour.		<p>January February March April May June July August September October November December</p>

Topic: SHAPE AND SPACE

Learning Area: Three-Dimensional Shapes (3-D Shapes)

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Understand and use the vocabulary related to 3-D shapes.</p> <p>2. Describe and classify common 3-D shapes.</p>	<ul style="list-style-type: none"> • Pupils identify solid shapes in real life such as; around the school and in the classroom. • Pupils build models using one type of solid shape and in combination with other solid shapes using readily available solid shapes, match boxes, cans, playdough and plasticine. • Identify a covered solid shape by sense of feeling. • Computer software can be used to draw and make three dimensional designs. 	<p><i>Pupils will be able to:</i></p> <p>i. Name solid shapes.</p> <p>i. Describe features of solid shapes.</p> <p>ii. Sort solid shapes.</p> <p>iii. Make models.</p>	<p>Informal classification and pupils able to articulate (say) the reasons for classification.</p> <p>Exclude technical terms.</p> <p>Limit to joining 3-D shapes.</p>	<p>shape solid edge face straight curve corner cube cuboid cone cylinder pyramid sphere make build draw</p>

Topic: SHAPE AND SPACE

Learning Area: Two-Dimensional Shapes (2-D Shapes)

LEARNING OBJECTIVES	SUGGESTED TEACHING & LEARNING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE	VOCABULARY
<p><i>Pupils will be taught to:</i></p> <p>1. Understand and use the vocabulary related to 2-D shapes.</p> <p>2. Describe and classify common 2-D shapes.</p>	<ul style="list-style-type: none"> • Pupils sort, name, colour and trace flat shapes. • Pupils match flat shapes with names. • Pupils talk about the shapes and patterns on curtains, clothes etc. • Pupils cut flat shapes and use it to make designs. e.g. <ol style="list-style-type: none"> a. Use squares and rectangles to make a man. b. Arrange triangles to form any pattern. • Computer software may be used to draw and make two-dimensional designs. 	<p><i>Pupils will be able to:</i></p> <ol style="list-style-type: none"> i. Name two-dimensional shapes. i. Describe features of two-dimensional shapes. ii. Sort two-dimensional shapes. iii. Make designs with two-dimensional shapes. 	<p>Encourage pupils to form creative designs.</p> <p>Exclude technical terms.</p> <p>Based on the same shapes but of different colour and size.</p> <p>Limit to joining cut-out 2-D or 3-D shapes.</p>	<p>square triangle circle rectangle star side face corner flat smooth</p>