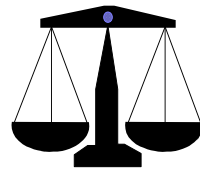


# MINISTRY OF EDUCATION

## REVISED CURRICULUM GUIDE

### MATHEMATICS

### GRADE 3



PRODUCED BY CURRICULUM DEVELOPMENT AND IMPLEMENTATION UNIT, NATIONAL CENTRE FOR EDUCATIONAL RESOURCE  
DEVELOPMENT  
PRINTED BY MATERIALS PRODUCTION UNIT, NCERD

September 2008

## ACKNOWLEDGEMENTS

The Ministry of Education is grateful to the following persons whose tireless work has resulted in the production of this revised Mathematics Guide for Grade 3.

Ali, Mohamed Osman  
Bowman, Samantha  
Chandrapaul, Tajewattie  
Chichester, Robin  
Dhanpat, Twaripersaud  
Enniss, Dorrette Ann  
Harripaul, Bhawase C.  
Jacobis, Fareeda  
Jaikarran-Wills, Pramawattie  
Jewnandan, Jaiwattie  
Jones, Linda  
Lall, Eshwar  
Lo-Hing, Paula  
Mckenzie, Colleen  
Mckenzie, Joseph  
Persaud, Pramellawattie  
Peters, Bhatraj  
Prasad, Krishna Nand  
Rambarose, Taramatie  
Ramnarine, Paramdai  
Singh, Lakewatti Dolly

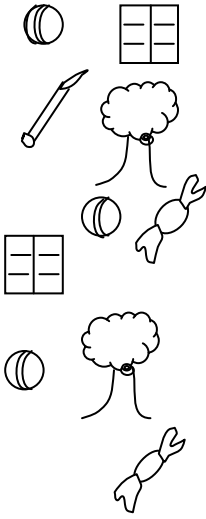
St. John's Community High School  
Amelia's Ward Primary School  
Gibson Primary School  
Belladrum Primary School  
Yakusari Primary School  
Mackenzie Primary School  
Crabwood Creek Primary School  
St. Anthony's Primary School  
Rama Krishna Primary School  
Arthurville Primary School  
Senior Subject Specialist (VSO), NCERD  
Lima Sands Primary School  
St. Sidwell's Primary School  
Virginia Primary School  
Senior Subject Specialist, NCERD  
Taymouth Manor Primary School  
Overwinning Primary School  
Senior Subject Specialist, NCERD  
Ketley Primary School  
Huist Dieren Primary School  
Stella Maris Primary School

**CURRICULUM GUIDE  
MATHEMATICS: GRADE 3**

**CONTENTS**

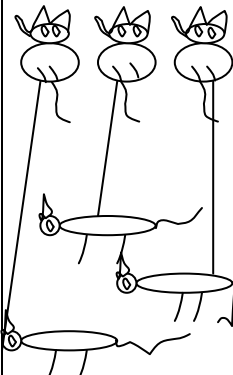
| <b>TOPIC</b>                         | <b>Page</b> |
|--------------------------------------|-------------|
| Sets                                 | 1           |
| Number Concepts                      | 6           |
| Operations, Relations and Properties | 17          |
| Geometry                             | 30          |
| Fractions                            | 39          |
| Decimal                              | 46          |
| Percentage – Ratio And Proportion    | 58          |
| Measurement:                         |             |
| Length                               | 61          |
| Capacity                             | 64          |
| Mass                                 | 68          |
| Time                                 | 71          |
| Statistics-Graphs                    | 72          |

**MATHEMATICS CURRICULUM GUIDE**  
**LEVEL 3**  
**SETS**

| TOPIC                    | OBJECTIVE                                 |   |                           | CONTENT              | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION  |
|--------------------------|---|---|---------------------------|----------------------|---|--|--|
|                          | SKILLS                                    | KNOWLEDGE   | ATTITUDE                  |                      |   |  |  |
| SETS<br>Describing a set | Identifying,<br>Collecting<br>Describing. | Put collection of objects into different sets.<br>Identify and describe sets of objects | Develop team spirit       | The concept of a set | Collect objects<br>Sort a mixed collection of objects into sets e.g.<br><br>Describe and name each set. | <ul style="list-style-type: none"> <li>- Sort a mixed collection of objects.</li> <li>- Describe and name each set</li> <li>- List the members of the sets.</li> </ul> | <b>Science</b><br>Observe animals in the environments and group them in a variety of ways<br><br><b>Art</b><br>Draw favourite animals and label the drawings clearly<br><br><b>Language Skills</b><br>Write sentences to describe sets of objects e.g. This set is made up of red squares. |
| Listing members of       | Grouping<br>Listing                       | - Identify and list members   | Value one's position as a | Members of a set.    | - Group objects into sets.  | Group objects into sets.   | <b>Social Studies</b>  |

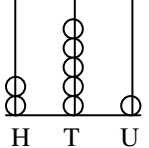
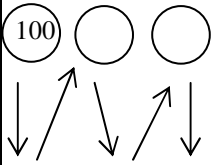
| TOPIC                      | OBJECTIVE  |   |  | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION  |
|----------------------------|--|---|--|---|---|--|--|
|                            | SKILLS   | KNOWLEDGE                                     | ATTITUDE   |   |   |  |  |
| sets.                      | Making sets<br>Naming sets                         | of sets                                       | member of the<br>family, school<br>and community |   | <ul style="list-style-type: none"> <li>- Name each set.</li> <li>- List the members of each set<br/>e.g. this set is made up of a circle, triangle, square, and rectangle.</li> </ul> <p style="text-align: center;">This set is made up of four even numbers - 2, 4, 6, and 8.</p> <p style="text-align: center;">4</p> <p style="text-align: center;">2            8</p> <p style="text-align: center;">6</p> | Name the members in each set<br>List the members of each set | <p>List members of CARICOM countries<br/><u>Science.</u><br/>Name vital parts of the human body e.g. brain, heart, stomach, intestines, lungs, and kidney.</p> <p><b>Music</b><br/>Form a musical band using items from the environments as instruments.</p> |
| Equal and equivalent sets. | Name the same set of objects in two different ways | Distinguish between equal and equivalent sets | Share ideas.                                     | Equal sets refer to a set with different names. | <ul style="list-style-type: none"> <li>- Form a set of objects</li> <li>- Give it a name and then</li> </ul>  | Identify equal and equivalent sets<br>Draw to show equal and | <b>Art</b><br>Draw and colour objects giving them different  |

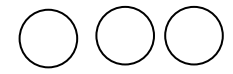
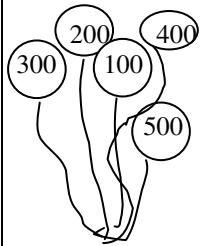
| TOPIC | OBJECTIVE  |           |          | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION      | AREAS OF<br>INTEGRATION  |
|-------|--|-----------|----------|--|--|-----------------|--|
|       | SKILLS   | KNOWLEDGE | ATTITUDE |  |  |                 |  |
|       | Counting the number of objects in a set<br>Comparing the number of objects in two sets |           |          | Equivalent sets have members that match one to one | <p>another name</p> <p>- Discuss that equal sets is the same set with different names e.g.</p> <p style="text-align: center;">A</p> <p style="text-align: center;">B</p>   | equivalent sets | names e.g. The Flag of Guyana, The Golden Arrowhead<br><u>Physical Education</u><br>Give different names to teams. |
|       |  |           |          |  | <p>Reinforce the concept of equivalent sets by matching objects in sets</p> <p>Introduce the concept of equivalent sets by having pupils examine pairs of sets.</p> <p>Classify sets whose members match one to one as</p> |                 |  |

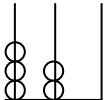
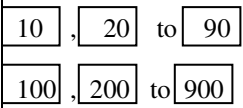
| TOPIC | OBJECTIVE |           |          | CONTENT | METHODS/<br>STRATEGIES-  | EVALUATION | AREAS OF<br>INTEGRATION |
|-------|-----------|-----------|----------|---------|--|------------|-------------------------|
|       | SKILLS    | KNOWLEDGE | ATTITUDE |         |  |            |                         |
|       |           |           |          |         | equivalent sets<br>e.g.<br> |            |                         |


### NUMBER CONCEPTS

| TOPIC   | OBJECTIVE  |   |                                     | CONTENT  | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION  |
|---|--|---|-------------------------------------|--|---|---|--|
|   | SKILLS   | KNOWLEDGE   | ATTITUDE                            |  |   |   |  |
| NUMBER<br>CONCEPTS<br><br>Counting, and<br>writing<br>numerals. | Counting<br>Grouping<br>Skip counting<br>Matching<br>Completing<br>sequences | <ul style="list-style-type: none"> <li>- Count and write numbers up to 100</li> <li>- Recognise patterns in skip</li> </ul> | .Do independent work<br>Share ideas | <ul style="list-style-type: none"> <li>- Count up to 100 and write numerals up to 100</li> </ul> | <ul style="list-style-type: none"> <li>- Use a number line, abacus or picture of a ladder to skip count by two's, three's , five's and ten's up to</li> </ul> | Complete sequences e.g.<br>5, 10, __, 20, 25.<br>2, 4, 6, __, __, 12<br>Match number names and numerals | Language<br>Skills<br>Composition<br>writing ideas in<br>sequence on a<br>topic. |

| TOPIC                                     | OBJECTIVE                        |   |  | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION  |
|---|----------------------------------|---|--|--|--|--|--|
|   | SKILLS                           | KNOWLEDGE   | ATTITUDE   |  |  |  |  |
|   |                                  | counting in two's, three's five's and ten's.<br>- Match names with numerals   |  |  | 100.<br>- Use cards to match number names and numerals e.g.<br>Fifteen           65<br>Sixty-five.....91<br>Ninety-one     15  |  | <u>Science:</u><br>(1) Match animals with their young<br>(2) Match parts of a plant/flower with their names.                               |
| Reading and writing in hundreds up to 900 | Recognising patterns<br>Counting | - Read and write numerals for numbers in hundreds up to 900<br>- Write the numerals and number names for these values<br>- Skip count in hundreds up to 1000 (one thousand) | Develop self reliance by working individually<br>Cooperate to complete tasks | - Read and write numerals up to 900<br>- Write names and their numerals e.g.<br>sixty four - 64-<br>one hundred twenty - 120.<br>- Skip count in hundreds e.g.<br>- 100,200,<br>- 300,400 etc. | - Use an abacus to read and write numerals up to 900<br>- Match numeral cards with numbers represented on the abacus.<br>- Use labelled balloons to skip count in hundreds up to 1000 e.g. | Write numerals represented on the abacus e.g.<br><br>H    T    U<br><div style="border: 1px solid black; padding: 2px; display: inline-block;">251</div><br><div style="border: 1px solid black; padding: 2px; display: inline-block;">two hundred and fifty one</div><br>- Complete sequences such as<br> | <u>Language Skills</u><br>Spell and pronounce number names<br><br><u>Reading:</u><br>Read selected passages with number names in the text. |



| TOPIC   | OBJECTIVE                                  |   |   | CONTENT  | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION                      |
|---|--|---|---|--|---|--|--|
|   | SKILLS                                     | KNOWLEDGE   | ATTITUDE  |  |   |  |  |
|   |  |   |   |  |   | 400 600  |  |
| Reading and counting in hundreds and tens up to 990 | Identifying<br>Calculating<br>Interpreting | - Show hundreds and tens to 990 with the numerals and number names to represent their values.               | Attend carefully to demonstration phase of the lesson               | - Numerals –hundreds and tens up to 990.<br>- e.g.<br><br>3 hundreds 2 tens.<br>= 300 + 20<br>= 320 | - Match given numerals with notation cards to 990 e.g.<br>   | Complete the following:<br><br>430 = __ hundreds<br>__ tens<br><br>170 = __ hundred<br>__ tens                                 | Craft<br>Make numeral cards                  |
| The value of each digit in a numeral                | Reading<br>Writing<br>Demonstrating        | - Read and write numerals up to 999<br>- State the values of the digits in numerals up to three (3) digits. | Value positions of objects in the environment e.g. trees, crops etc | - Read and write numerals up to 999.<br>- State values of digits in numerals up to 999.<br>- e.g. 381 = 3 hundreds + 8 tens + 1 one  | - Use the abacus to show the value of each digit in 3 digit numerals Read and write these numbers both numerically and in words.<br>- Use tally chart to read and write value of each digit | - Read and write numbers both numerically and in words up to 999.<br>- Write numerals as shown on an abacus and a Tally Chart. | <b>Language Skills</b><br>Spell number names |

| TOPIC                | OBJECTIVE   |  |  | CONTENT  | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION  |
|----------------------|---|--|--|--|---|--|--|
|                      | SKILLS  | KNOWLEDGE                                | ATTITUDE   |  |   |  |  |
|                      |   |  |  |  | - e.g. hundreds, tens and ones.   | - Write the value of each digit in given numerals.   |  |
| Ordering numbers     | Comparing<br>Ordering<br>Using comparison symbols | - Recognise that numbers can be ordered. | Develop an approach tendency towards mathematics | - Compare and order numbers up to 3 digit using the symbols<br>is less than ><br>is greater than <<br>is equal to =<br>e.g.<br>119 < 256 | - Use numeral cards to make up 3 digit numerals.<br>- Read and compare numerals formed (use the appropriate symbols).<br>- Arrange numerals in ascending order.<br>- Rearranging a set of 1 digit numerals to make up 3 digit numerals e. g.<br>- 842 formed from the set of numerals 2,4, 8. | Compare and order numerals<br><br>Complete sequences e.g. 198, 199, __, 201.<br><br>Complete the number sentences using the symbols =, >, <. | Craft<br>Make numeral cards for use and display  |
| Odd and even numbers | Classifying<br>Counting<br>Analysing              | Identify odd and even numbers up to 999. | Develop determination to succeed                 | Odd and even numbers up to 999.  | - Arrange given sets of objects into groups of twos and discuss the sets of objects that  | - Identify and group odd and even numbers<br>- Complete sequences  | Physical Education:.<br>Concentration Game.<br> |



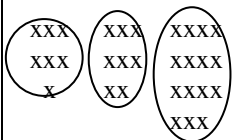
| TOPIC                  | OBJECTIVE  |                            |  | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION  |
|------------------------|--|----------------------------|--|--|--|--|--|
|                        | SKILLS   | KNOWLEDGE                  | ATTITUDE                                       |  |  |  |  |
|                        |  |                            |  |  | <ul style="list-style-type: none"> <li>make sets of twos without remainders, and with remainders.</li> <li>- Identify even and odd numbers on the basis of no remainders and remainders</li> <li>- Use a number line /hundred chart to skip count in twos starting at zero and at 1</li> </ul>   | <ul style="list-style-type: none"> <li>by writing two other even/odd numbers.<br/>e.g.<br/>846,856.866-, -, -<br/>749,759,769,-,-,-</li> </ul>   | 516 517 518<br><br>517 520<br><br>Step on the odd/even numbers to move from one circle to the other.   |
| Ordinals - 1st to 31st | Ordering<br>Recognising and using patterns<br>Discussing | Write ordinals up to 31st. | Apply knowledge/skills in everyday experiences | Ordinals up to 31st.<br>e.g.<br>(a) 1st to 9th<br>(b) 10th, 20th, 30th<br>(c) 10th- 19th<br>21st- 29th<br>30th- 31st | <ul style="list-style-type: none"> <li>- Use number lines to order a set of objects.</li> <li>- Discuss results i.e. which is first, second, etc.</li> <li>- Arrange a set of number cards in any order e.g. first to ninth and vice versa.</li> <li>- Use calendar to do varying activities involving ordinals</li> <li>- e.g. Twelfth month of the year</li> </ul> | <ul style="list-style-type: none"> <li>- Order a set of objects into given positions.</li> <li>- Order a set of number cards as required.</li> <li>- Read and write dates using ordinals.</li> </ul> | <b>Language Skills</b><br>vocabulary:<br>Arrange words in alphabetical order.<br>Discuss pictures and photographs which show athletic races.<br><br>Social Studies.<br>Dates of festivals and observances in Guyana. |

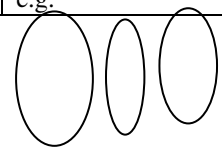
| TOPIC          | OBJECTIVE                          |  |  | CONTENT                          | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION  |
|----------------|------------------------------------|--|--|----------------------------------|---|---|--|
|                | SKILLS                             | KNOWLEDGE                              | ATTITUDE   |                                  |   |   |  |
|                |                                    |  |  |                                  | - 31 <sup>st</sup> day of a month.  |   |  |
| Roman numerals | Formulating rules<br>Investigating | Write Roman numerals up to 12 i.e. XII | Appreciate that other numeration systems other than the Hindu-Arabic System exist. | Roman Numerals up to 12 i.e. XII | <ul style="list-style-type: none"> <li>- Name digits we use in the Hindu/Arabic system to write numerals – 0, 1, 2, 3, etc.</li> <li>- Write the Roman symbols which are used to write numerals from 1 to 12</li> <li>- e.g. I for 1</li> <li>- V for 5</li> <li>- X for 10</li> <li>- Write the numerals 1 to 12 and show Roman numerals for 1 and 2 using a number line</li> <li>- Write the Roman numerals for 3 and 4.</li> <li>- Introduce the Roman numeral for five.</li> <li>- Discuss the numerals 4 and 6 in relation to</li> </ul> | <ul style="list-style-type: none"> <li>- Match Roman Numeral cards with numerals</li> </ul> <div style="text-align: center; margin: 5px 0;"> <span style="border: 1px solid black; padding: 2px;">IX</span> — <span style="border: 1px solid black; padding: 2px;">9</span> </div> <ul style="list-style-type: none"> <li>- Write and read given numerals, 1 to 12 as Roman numerals and vice versa.</li> </ul> | <b>Social Studies</b><br>Find out when Roman numerals are used e.g. numbering pages, on some clock faces |

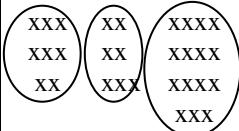
| TOPIC | OBJECTIVE |           |          | CONTENT | METHODS/<br>STRATEGIES-   | EVALUATION | AREAS OF<br>INTEGRATION |
|-------|-----------|-----------|----------|---------|---|------------|-------------------------|
|       | SKILLS    | KNOWLEDGE | ATTITUDE |         |   |            |                         |
|       |           |           |          |         | <p>5</p> <ul style="list-style-type: none"> <li>- e.g.</li> <li>- 4 is one more than 5, 6 is one more than 5.</li> <li>- Write 4 and 6 i.e. I less than V is IV,</li> <li>- I more than V is VI.</li> <li>- Discuss taking into account that Roman numeral I is written before V for 4 and after V for 6</li> <li>- Identify patterns in Roman numerals 1 to 6 and use these patterns to write the Roman numerals for 7 and 8</li> <li>- Recognise X as the Roman numeral for 10 and use previous identified patterns to write the Roman numerals 9 to 12.</li> </ul> |            |                         |

## OPERATIONS, RELATIONS AND PROPERTIES

| TOPIC   | OBJECTIVE   |   |  | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION  |
|---|---|---|--|--|--|--|--|
|   | SKILLS  | KNOWLEDGE   | ATTITUDE   |  |  |  |  |
| OPERATION<br>RELATIONS &<br>PROPERTIES.<br><br>Basic addition<br>and subtraction<br>facts | Combining<br>Counting<br>Writing<br>mathematics<br>statements<br>Manipulating<br>objects<br>Recognising and<br>using patterns | - Recall the<br>basic addition<br>and<br>subtraction<br>facts up to 18.   | Rely on<br>addition and<br>subtraction<br>facts in solving<br>problems | Basic addition<br>and<br>subtraction<br>facts to 18.<br>e.g.<br><br>$1 + 0 = 1$<br>$1 + 1 = 2$<br>$1 + 2 = 3$<br>$2 + 0 = 2$<br>$1 - 0 = 1$<br>$1 - 1 = 0$   | Combine two sets<br>of objects and write<br>number sentences<br>to show these.<br>Use the table for<br>basic addition and<br>subtraction facts   | Complete addition<br>and subtraction<br>facts tables | Music<br>Chant number<br>facts with<br>rhythmic body<br>movements  |
| Addition of<br>two, three, and<br>four 1 and 2<br>digit numbers                           | Combining<br>Computing<br>Recalling<br>Communicating  | - Use addition<br>facts to add<br>two, three and<br>four 1 and 2<br>digit numbers<br>(including the<br>zero property<br>and the<br>commutative<br>property) | Develop<br>persistency in<br>attacking<br>problems                     | Use addition<br>facts to add<br>two, three and<br>four 1 and 2<br>digit numbers.<br><br>e.g.<br>$9 + 5 = 14$<br>$5 + 9 = 14$<br>$6 + 0 = 6$<br>$0 + 6 = 6$<br>$10 + 15 = 25$<br>$15 + 10 = 25$<br>e.g.<br>$10 + 15 + 10 +$<br>$12 = 47.$<br>$12 + 15 + 10 +$<br>$10 = 47.$ | Add two, three and<br>four 1 digit<br>numbers (including<br>the zero and the<br>commutative<br>properties)<br>Add two, three and<br>four 2 digit<br>numbers (including<br>the zero and<br>commutative<br>properties) | Quiz<br>Written test                                 | Language<br>Skills<br>Make up<br>mathematics<br>stories in which<br>numbers are to be<br>added.<br><br>Games<br>Games involving<br>addition of<br>numbers. |
| The associative<br>property of  | Applying the<br>associative   | - Add, grouping<br>numbers in   | Work<br>harmoniously   | Addition of<br>three 1 and 2   | Combine objects of<br>three sets in  | Complete the<br>following in the                     | Physical   |

| TOPIC                   | OBJECTIVE   |   |                | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION   |
|-------------------------|---|---|----------------|---|---|--|---|
|                         | SKILLS  | KNOWLEDGE   | ATTITUDE       |   |   |  |   |
| addition                | property in computing.                                    | different ways  | with others    | digit numbers using the associative property<br>e.g.<br>(i) $5 + 3 + 4 = 12$<br>or<br>$4 + 3 + 5 = 12$<br>(ii) $15 + 10 + 12 + 11$<br><u>or <math>11 + 12 + 15 + 10 = 48</math>.</u><br>(iii) $15 + 10 + 12 = 37$<br>or $25 + 12 = 37$<br>or $15 + 22 = 37$ | different ways.<br>Record results and discuss<br>Add three, 1 digit numbers by grouping them in different ways.<br>Add three, 2 digit numbers by grouping them in different ways.<br>Discuss the result e.g. the way the numbers are grouped does, not change the answer. | simplest way.<br>(i) $6 + 3 + 4 = -$<br>(ii) $24 + 10 + 15 = -$<br>(iii) $50 + 16 + 50 = -$  | Education<br><br>Arrive at an identified position<br><br>by hopping, walking and jumping varying the movements. |
| The inverse of addition | Combining<br>Partitioning<br>Writing<br>Making statements | - Use the concept of inverse operations to solve problems | Verify results | Subtraction as the inverse of addition  | Add two sets of objects and write the number sentences to show same.<br>e.g.<br><br>$7 + 8 = 15.$<br>Take away one of the two sets and record the answer.<br>e.g.                    | Complete the following<br>$16 = 9 + \square$<br>$\square + 9 = 16.$<br>$12 + 5 = \square$<br>$17 = \square + 12$<br>$9 + 7 = Y$<br>$16 - 7 = Y$<br>$16 - 9 = Y$<br>$12 + 5 = Y$<br>$17 - 12 = Y$<br>$17 - 5 = Y$ |   |



| TOPIC   | OBJECTIVE               |   |              | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION |
|---|-------------------------|---|--------------|---|---|---|-------------------------|
|   | SKILLS                  | KNOWLEDGE   | ATTITUDE     |   |   |   |                         |
|   |                         |   |              |   | <p>XXXX XX XX<br/> XXXX XX XXX<br/> XXXX XX XX<br/> XXX XX</p> <p>15 - 8 = 7</p> <p>Recombine the answers to find the original</p>  <p>8 + 7 = 15</p>  |   |                         |
| Adding a combination of 1, 2, and 3 digit numbers | Computing<br>Regrouping | - Regrouping in ones only, in the tens only, in the ones and tens only. | Appreciating | Add a combination of 1 – 2 and 3 digit numbers not exceeding 3 addends with regrouping. | Use the expanded notation to show 2 and 3 digit numbers<br>e.g. 27 = 2 tens and 7 ones or 20 + 7.<br><br>Use the expanded notation to show addition of (a) two 2 digit numbers without regrouping. e.g.<br>23 = 2 tens + 3 ones<br>+ 16 = 1 ten + 6 ones<br>39 = 3 tens + 9 ones. | Add a combination of 1, 2 and 3 digit numbers not exceeding 3 addends with regrouping in the ones in the tens only, in the ones and tens. |                         |

| TOPIC | OBJECTIVE |           |          | CONTENT | METHODS/<br>STRATEGIES-  | EVALUATION | AREAS OF<br>INTEGRATION   |
|-------|-----------|-----------|----------|---------|--|------------|---|
|       | SKILLS    | KNOWLEDGE | ATTITUDE |         |  |            |   |
|       |           |           |          |         | (b) 2 digit and 3 digit numbers with 2 or 3 addends regrouping in the ones only.<br>e.g.<br>$24 = 2 \text{ tens} + 4 \text{ ones}$<br>$+16 = 1 \text{ ten} + 6 \text{ ones}$<br>$24 + 16 = 3 \text{ tens} + 10 \text{ ones}$<br><hr/> i.e. 4 tens + 0 ones<br>= 40   |            |   |
|       |           | -         |          |         | Use addition algorithm to show addition of 2 and 3 digit numbers with regrouping in the tens only. e.g.<br>$264 = 200 + 60 + 4$<br>$+ 385 = 300 + 80 + 5$<br><hr/> $649 = 500 + 140 + 9$<br>$= 500 + 100 + 40 + 9$<br>$= 600 + 40 + 9.$<br>- Use addition algorithm to show addition of up to three 3 digit numbers with regrouping in the tens only. Use expanded notation to add up to three 3 digit numbers with regrouping in the ones and |            | <b>Social Studies</b><br>Find the population size of three large classes in the school<br><br><b>Games</b><br>Games involving the addition of numbers e.g. Target 100 |

| TOPIC                             | OBJECTIVE                 |  |   | CONTENT  | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION   |
|-----------------------------------|---------------------------|--|---|--|---|---|---|
|                                   | SKILLS                    | KNOWLEDGE  | ATTITUDE  |  |   |   |   |
|                                   |                           |  |   |  | tens.   |   |   |
| Subtracting 2 and 3 digit numbers | Subtracting<br>Regrouping | Recognise that subtraction involves removal e.g. removing a set of objects from a given set. | Develop an awareness of the importance of subtraction in everyday life. | Subtract 1, 2 and 3 digit numbers in all possible combination without and with regrouping. | Using expanded notation to show<br>(a) Subtraction of 2 and 3 digit numbers without regrouping e.g.<br>$\begin{array}{r} 46 = 4 \text{ tens} + 6 \text{ ones} \\ - 22 = 2 \text{ tens} + 2 \text{ ones} \\ \hline 24 = 2 \text{ tens} + 4 \text{ ones} \end{array}$<br>(b) Subtraction of 2 and 3 digit numbers with regrouping in the ones only.<br>(c) Subtraction of 2 and 3 digit numbers with regrouping in the tens only<br>(d) Subtraction of 2 and 3 digit numbers with regrouping in the ones and tens.<br>Using the subtraction algorithm to show subtraction e.g.<br>$\begin{array}{r} ^5 6 \ ^1 8 \\ - 3 \ 9 \ 3 \\ \hline 2 \ 2 \ 5 \end{array}$ | Subtract 1, 2 and 3 digit numbers from larger 1, 2 and 3 digit numbers in all possible combination without and with regrouping. | Science<br>Plant Jigsaw<br>Break up plants so that roots, stems, flowers, fruits and leaves are separated then put the plant back together.<br><br>Physical Education<br>Games involving removing members from one group to form another group. |

| TOPIC                 | OBJECTIVE   |   |                   | CONTENT   | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION   |
|-----------------------|---|---|-------------------|---|--|--|---|
|                       | SKILLS  | KNOWLEDGE   | ATTITUDE          |   |  |  |   |
| Multiplication tables | Recalling<br>Building up tables<br>Using tables<br>Memorising | Recall multiplication tables for 2 and 3 and build up and use multiplication tables for 4, 5 and 10 | Observe carefully | Multiplication tables 2, 3, 4, 5 and 10<br>(Include property for zero and one and the commutative property) | Quick drills to recall 2 and 3 times tables<br>Skip counting in twos on the number line<br>Write addition number sentences to show same e.g. move from 2 to 4 to 6 to 8<br>i.e. $2 + 2 + 2 + 2 = 8$<br>or $4 \times 2 = 8$   | Complete the following<br>$2 \times 1 = Y$<br>$Y \times 4 = 20$<br>$4 \times Y = 8$<br>$5 \times Y = 15$<br>$10 \times 6 = Y$<br>$4 \times 0 = Y$<br>$5 \times 0 = Y$<br>$0 \times 10 = Y$ | Games<br>Games involving multiplication facts related to 2,3,4,5 and 10 times tables. |
|                       |   |   |                   |   | Make 4 sets of one object each, two objects each, three objects each etc.<br>Write number sentences with multiplication sign to show each e.g.<br>$4 \times 1 = 4$<br>$4 \times 2 = 8$<br>$4 \times 3 = 12$<br>Continue this way to build multiplication tables for four.<br>Discuss the concept of a number multiplied by zero by using empty sets<br>Discuss the commutative |  |   |

| TOPIC          | OBJECTIVE                           |                                     |                                      | CONTENT   | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION                  |
|----------------|-------------------------------------|-------------------------------------|--------------------------------------|---|--|--|--|
|                | SKILLS                              | KNOWLEDGE                           | ATTITUDE                             |   |  |  |  |
|                |                                     |                                     |                                      |   | property. i.e. the order in which two numbers are multiplied does not change the answer<br>e.g.<br>$4 \times 2 = 8$<br>$2 \times 4 = 8$ .<br>Repeat activities for 5 times and 10 times tables.  |  |  |
| Multiplication | Computing<br>Grouping<br>Regrouping | - Use expanded notation to multiply | Solve problems with logical thinking | Multiplication of 2 digit and 3 digit numbers by 2, 3, 4 and 5 without and with regrouping resulting in answers not exceeding 3 digits. | Use expanded notation to multiply 2 and 3 digit numbers by 1 digit number without regrouping<br>e.g.<br>$23 = 2 \text{ tens} + 3 \text{ ones}$<br>$\begin{array}{r} 23 \\ \times 2 \\ \hline 46 \end{array} = 4 \text{ tens} + 6 \text{ ones}$<br>$= 40 + 6$<br>$= 46$ | Use expanded notation to multiply 2 and 3 digit numbers without and with regrouping in the ones and tens..<br>Complete multiplication without using expanded notation<br>e.g.<br>$256$<br>$\begin{array}{r} 256 \\ \times 2 \\ \hline \end{array}$ | Games<br>Games involving multiplication. |
|                |                                     |                                     |                                      |   | Multiplying 2 and 3 digit numbers without showing the expanded notation.<br>e.g.   |  |  |

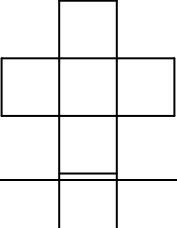
| TOPIC                | OBJECTIVE                              |                                |   | CONTENT                                  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION |
|----------------------|--|--------------------------------|---|--|--|--|-------------------------|
|                      | SKILLS                                 | KNOWLEDGE                      | ATTITUDE  |  |  |  |                         |
|                      |  |                                |   |  | (1) $\begin{array}{r} 23 \\ \times 2 \\ \hline 46 \\ - \\ \hline \end{array}$ Multiplying 2 and 3 digit numbers with regrouping using expanded notation then the multiplication algorithm. Regroup in the ones only<br>e.g. $\begin{array}{r} 146 \\ \times 2 \\ \hline 292 \end{array}$ Regroup in the tens only<br>e.g. $\begin{array}{r} 141 \\ \times 4 \\ \hline 564 \end{array}$ |  |                         |
| Multiplication by 10 | Recognising patterns<br>Using patterns | Multiply 2 digit numbers by 10 | Enjoy searching for patterns<br>Rely on algorithms as an efficient method of doing calculations | Multiplication of 2 digit numbers by 10. | Use expanded notation to multiply 2 digit numbers by 10 (horizontally and vertically)<br>e.g.<br>$47 \times 10 = (4 + 7) \times 10$  | Use expanded notation to multiply 2 digit numbers by 10. Solve word problems including multiplication of 2 digit number by |                         |



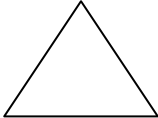
| TOPIC                                     | OBJECTIVE  |  |                  | CONTENT                                   | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION                              |
|---|--|--|------------------|---|--|--|--|
|   | SKILLS   | KNOWLEDGE  | ATTITUDE         |   |  |  |  |
|   |  |  |                  |   | $  \begin{array}{r}  = 4 \text{ tens} + 7 \text{ ones} \\  \underline{\quad \quad \quad} \\  \quad \quad \quad \times 10 \\  \underline{\quad \quad \quad} \\  \quad \quad 400 + 70 \\  \underline{\quad \quad \quad} \\  = 470  \end{array}  $  | 10.<br><br>Quiz  |  |
| Division as the inverse of multiplication | Investigating<br>Use sketches and diagrams to solve problems | Use the concept of division as the inverse of multiplication to solve problems | Think critically | Division as the inverse of multiplication | Using concrete materials to solve simple division problems (based on the basic division fact).<br>Draw diagrams to show simple division problems and writing number sentence to show same e.g. separate a set of 8 objects into groups of 2 each and then recombine the groups of 2 objects to make a set of 8 objects | Solve division problems using concrete materials<br>Show division as the inverse of multiplication<br>Complete number sentences e.g.<br>$8 \times 3 = \square$<br>$24 \div 3 = \square$<br>$24 \div 8 = \square$ | Games<br>Games involving division and multiplication |
|   |  |  |                  |   | $  \begin{array}{cccc}  \textcircled{xx} & \textcircled{xx} & \textcircled{xx} & \textcircled{xx} \\  \\  8 \div 2 = 4 \\  4 \times 2 = 8 \\  \text{Use the number line to show division as the inverse of multiplication. Discuss results on number line.}  \end{array}  $  |  |  |

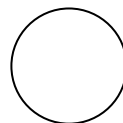
| TOPIC   | OBJECTIVE  |   |                    | CONTENT  | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION  |
|---|--|---|--------------------|--|---|---|--|
|   | SKILLS   | KNOWLEDGE                                       | ATTITUDE           |  |   |   |  |
| Division of 2 and 3 digit numbers by 2, 3, 4 and 5. | Grouping<br>Regrouping<br>Computing<br>Discussing<br>Recording | - Divide 2 and 3 digit numbers by 2, 3, 4 and 5 | Study on one's own | Division: 2 and 3 digit numbers by 2, 3, 4 and 5 by repeated subtraction | Use concrete materials e.g. base ten blocks to make sets of objects, taking away from the sets a fixed amount of 2,3, 4 and 5 objects until no objects are in the original sets.<br>Use repeated subtraction to do division of 2 and 3 digit numbers by 2, 3, 4, 5.<br>e.g.<br>(i) $10 \div 2$<br>(ii) $100 \div 5$<br><br>$\begin{array}{r} 5 \\ 2 \overline{)10} \\ \underline{- 2} \phantom{0} \\ 8 \phantom{0} \\ \underline{- 2} \phantom{0} \\ 6 \phantom{0} \\ \underline{- 2} \phantom{0} \\ 4 \phantom{0} \\ \underline{- 2} \phantom{0} \\ 2 \phantom{0} \\ \underline{- 2} \phantom{0} \\ 0 \end{array}$ | Use concrete materials to show division through repeated subtraction.<br>Write number sentences to show division<br>e.g. $15 \div 5 = 3$<br><br>Use multiplication table to reinforce the relationship between multiplication and division<br>e.g. $2 \times 1 = 2$<br>$2 \div 2 = 1$ | Music<br>Songs linked to repeated subtraction e.g. 20 green bottles. |

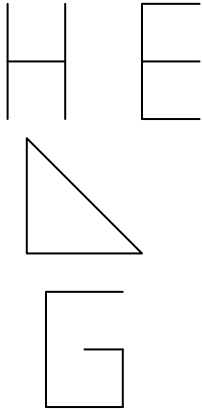

| TOPIC | OBJECTIVE |           |          | CONTENT | METHODS/<br>STRATEGIES-  | EVALUATION | AREAS OF<br>INTEGRATION |
|-------|-----------|-----------|----------|---------|--|------------|-------------------------|
|       | SKILLS    | KNOWLEDGE | ATTITUDE |         |  |            |                         |
|       |           |           |          |         | Discuss the process by asking questions.<br>e.g. How many times did you take away 2 from 10?<br>How many times can you take away 5 from 100? |            |                         |

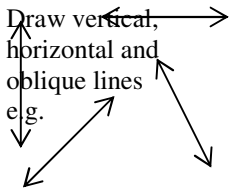
### GEOMETRY




| TOPIC               | OBJECTIVE                          |  |  | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION  |
|---------------------|------------------------------------|--|--|---|---|--|--|
|                     | SKILLS                             | KNOWLEDGE  | ATTITUDE   |   |   |  |  |
| Geometry.<br>Solids | Sorting<br>Identifying<br>listing. | Identify and name simple solids e.g. cube, cuboid, cone, cylinder and sphere and make models of the cube and cuboid from nets. | <ul style="list-style-type: none"> <li>- Develop stronger awareness of objects in the environment</li> <li>- Appreciate contribution from others.</li> </ul> | Solids-cube, cuboid, cone, cylinder and sphere. | <ul style="list-style-type: none"> <li>- Sort given sets of solids according to shape.</li> <li>- Discuss the shapes in each set.</li> <li>- Introduce the correct mathematical names for each solid listed.</li> <li>- Make models of cubes and cuboids from nets</li> <li>- e.g. use the net of the cube to make a model of a cube</li> </ul>  | <ul style="list-style-type: none"> <li>- Sort a given set of solids.</li> <li>- Discuss what was done.</li> <li>- Match name cards with solids.</li> <li>- Use nets to make solids.</li> <li>- Identify specific solids from a set of solids.</li> </ul> | <p style="text-align: center;"><b>Craft</b></p> <p>Make models of solids.</p> <p style="text-align: center;"><b>Science</b></p> <p>Identify solids, liquids and gases.</p> |


| TOPIC                | OBJECTIVE   |   |  | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION   |
|----------------------|---|---|--|---|---|--|---|
|                      | SKILLS  | KNOWLEDGE   | ATTITUDE                                       |   |   |  |   |
| Properties of solids | Sorting a given set of solids<br>Counting e.g number of edges<br>Examining solids<br>Stating properties of solids<br>Recording findings | Identify the number of surfaces and edges on a cube, cuboid, cone, cylinder and sphere and describing the nature of the surfaces and edges. | - Observe carefully before recording findings. | Number of surfaces and edges of a cube, cuboid, cylinder, cone and sphere.<br>Nature of their surfaces and edges e.g. straight edges, curved edges, flat surfaces, curved surfaces.   | Fold dotted lines and tape final ends.of nets of solids<br>- Sort a given set of solids according to their edges.<br>- Discuss the solids and observe that some solids have straight edges and some have curved edges.<br>- Count the number of flat or curved surfaces on each solid.<br>-   | - Sort a given set of solids according to the edges.<br>- Count the number of surfaces (flat or curved ) on each solid.<br>- Quiz<br>- Puzzles                     | <b>Craft</b><br>Make models of solids<br><b>Art</b><br>Draw/sketch solids in the environment  |
| Plane shapes         | Drawing, Sorting, classifying and naming plane shapes.  | Classify plane shapes (square, rectangle, triangle and circle) according to the number of sides and vertices (corners).                     | Enjoy doing assigned tasks.                    | Plane shapes- square, rectangle, triangle, and circle.<br><br>square<br><br>rectangle<br> | - Trace around edges of solids to produce plane shapes.<br>- Sort a set of plane shapes according to number of sides and vertices (corners).<br>- Use templates of plane shapes to trace around the sides.<br>- Name the shapes drawn.<br>- State the number of sides and vertices.<br>- Use rectangular and circular geoboards to make plane shapes. | - Sort sets of plane shapes according to number of sides and vertices.<br>- Match plane shapes with their names.<br>- Demonstrate tessellation using plane shapes. | <b>Art</b><br>Use plain shapes to make patterns either by pasting or tracing around sides.<br>Colour patterns made.<br><b>Physical Education</b><br>Link hands to make representations of plane shapes. |



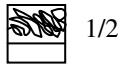
| TOPIC         | OBJECTIVE  |   |                               | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION  |
|---------------|--|---|-------------------------------|--|--|--|--|
|               | SKILLS   | KNOWLEDGE   | ATTITUDE                      |  |  |  |  |
|               |  |   |                               | triangle<br><br>circle                           |  |  |  |
| Right angles  | Folding paper to make right angles.<br>Identifying corners that are right angled in the classroom and on plane shapes. | Constructing a right angle by paper folding and recognising corners that are right angled in the environment. | Attend closely to discussion. | Construction and identification of right angles. | <ul style="list-style-type: none"> <li>- Fold pieces of paper to construct a right - angle.</li> <li>- Use the paper right – angle to find corners in the classroom that are right angled.</li> <li>- Use the paper right angle to find the right angles on given shapes e.g.</li> </ul> <div style="text-align: center;">  </div> | <ul style="list-style-type: none"> <li>- Identify right angles on given shapes.</li> </ul> | <u>Physical Education</u><br>Link hands to form shapes that have corners that are right angled.<br><br>Art<br>Draw objects involving right angles e.g. a cart.<br><br> |
| Line segments | Drawing representations of lines and line  | Identify and draw representations   | Develop a cooperative spirit. | Points, lines, line segments and congruent       | <ul style="list-style-type: none"> <li>- Join two points or more to show representations of</li> </ul>   | <ul style="list-style-type: none"> <li>- Show line segments on lines.</li> </ul>           | Art<br>Draw objects using line   |

| TOPIC | OBJECTIVE                               |   |          | CONTENT        | METHODS/<br>STRATEGIES-   | EVALUATION                     | AREAS OF<br>INTEGRATION |
|-------|---|---|----------|----------------|---|--------------------------------|-------------------------|
|       | SKILLS                                  | KNOWLEDGE   | ATTITUDE |                |   |                                |                         |
|       | segments.<br>Identifying line segments. | of points, lines, line segments, and congruent line segments. |          | line segments. | <p>lines denoting continuity in both directions with arrowheads.</p> <p>- Draw vertical, horizontal and oblique lines e.g.</p>  <p>-</p> <p>- Have two pupils hold a length of string to represent a line segment and discuss.</p> <p>- Fold and crease a sheet of paper to show a line segment.</p> <p>- Mark off line segments on given lines</p> <p>- Estimate length of line segments using non – standard units</p> <p>- Measure line segments using standard units</p> <p>- From a set of line segments, select those that appear to</p> | - Draw congruent line segments | segments                |

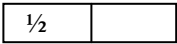
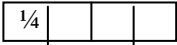
| TOPIC              | OBJECTIVE                                   |  |   | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION  | AREAS OF<br>INTEGRATION |
|--------------------|---|--|---|--|--|---|-------------------------|
|                    | SKILLS                                      | KNOWLEDGE                                  | ATTITUDE  |  |  |   |                         |
|                    |   |  |   |  | <ul style="list-style-type: none"> <li>be of the same length</li> <li>- Measure line segments and identify those with the same length as congruent line segments.</li> </ul> |   |                         |
| Symmetrical shapes | Folding paper to make symmetrical patterns. | Construct and identify symmetrical shapes. | Appreciate symmetry in the environment e.g. butterflies | <p>Symmetrical shapes.</p> <ul style="list-style-type: none"> <li>- Fold a piece of paper into two parts and tearing around the sides e.g.</li> </ul> <div style="text-align: center;">  <p>1</p>  <p>2</p>  <p>3</p> </div> <ul style="list-style-type: none"> <li>- Discuss the results.</li> <li>- Draw shapes along</li> </ul> | <ul style="list-style-type: none"> <li>- Make symmetrical shapes by folding, tearing, and cutting pieces of paper.</li> <li>- Identify symmetrical shapes.</li> </ul>        | <p style="text-align: center;"><b>Art</b></p> <p>Draw symmetrical patterns and colour them.</p> |                         |


| TOPIC | OBJECTIVE |           |          | CONTENT | METHODS/<br>STRATEGIES-   | EVALUATION | AREAS OF<br>INTEGRATION |
|-------|-----------|-----------|----------|---------|---|------------|-------------------------|
|       | SKILLS    | KNOWLEDGE | ATTITUDE |         |   |            |                         |
|       |           |           |          |         | <p>the fold of a piece/sheet of paper e.g.</p>  <p>Cut/tear along the shapes and discussing the results.<br/>Use mirrors to view reflection of objects<br/>Use carbon papers to draw symmetrical shapes<br/>Use upper case letters of the English alphabet to investigate for symmetry</p> |            |                         |

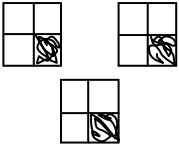
### FRACTIONS

| TOPIC   | OBJECTIVE   |  |   | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION   |
|---|---|--|---|---|---|---|---|
|   | SKILLS  | KNOWLEDGE  | ATTITUDE  |   |   |   |   |
| <p>FRACTION</p> <p>Halves, quarters, and eighths of wholes and sets of objects.</p> | <p>Folding paper to show fractions.<br/>Manipulating objects.<br/>Drawing.<br/>Computing.</p> | <p>Find <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, and <math>\frac{1}{8}</math>, of wholes and sets of objects.</p> | <p>Sharing ideas/materials with other children.</p> | <p>Find <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, and <math>\frac{1}{8}</math> of a set of objects.</p> | <p>Fold, shade and label strips of cardboard or geometric cut outs to show <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, and <math>\frac{1}{8}</math></p>  | <p>Draw diagrams shading and labelling <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, and <math>\frac{1}{8}</math> of them.<br/>Draw sets of objects and shade <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math> and <math>\frac{1}{8}</math> of the number of objects.</p> | <p>Language Skills<br/>Pronounce and spell words such as halves, quarters and eighths</p> |



| TOPIC                                   | OBJECTIVE   |   |                               | CONTENT   | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION |
|---|---|---|-------------------------------|---|--|--|-------------------------|
|   | SKILLS  | KNOWLEDGE   | ATTITUDE                      |   |  |  |                         |
|   |   |   |                               |   | $\frac{1}{4}$<br><br>$\frac{1}{8}$<br><br>Use objects to find $\frac{1}{2}, \frac{1}{4}$ , and $\frac{1}{8}$ of a set of objects<br>e.g.<br>$\frac{1}{2}$ of 4 pencils<br>$\frac{1}{4}$ of 12 genips<br>$\frac{1}{8}$ of 16 rubber bands   |  |                         |
| Comparing halves, quarters and eighths. | Shading and labelling parts of a whole to show halve, quarters, eighths.<br>Comparing halves, quarters and eighths. | Shade and label to show fractions of wholes<br>Compare fractions. | Work cooperatively in groups. | Shade and label $\frac{1}{2}, \frac{1}{4}$ and $\frac{1}{8}$ on diagrams.<br>Compare $\frac{1}{2}, \frac{1}{4}$ and $\frac{1}{8}$ using the symbols<br>Is greater than ><br>Is less than <<br>Is equal to = | Use geometric cut outs to show, shade and label $\frac{1}{2}, \frac{1}{4}$ and $\frac{1}{8}$ .<br>Compare fractions using congruent strips e.g.<br><br><br>$\frac{1}{2} > \frac{1}{4}$<br>$\frac{1}{4} < \frac{1}{2}$<br>$\frac{1}{8} < \frac{1}{4}$<br>$\frac{1}{4} > \frac{1}{8}$ | Compare halves, quarters and eighths using > < =<br>e.g. Complete the following using the symbols >, <, =<br>$\frac{1}{2}$ ○ $\frac{2}{4}$<br>$\frac{1}{4}$ ○ $\frac{1}{2}$<br>$\frac{1}{8}$ ○ $\frac{2}{4}$ |                         |

| TOPIC   | OBJECTIVE   |   |  | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION  |
|---|---|---|--|--|--|--|--|
|   | SKILLS  | KNOWLEDGE   | ATTITUDE   |  |  |  |  |
| Thirds,sixths and twelfths of wholes and sets of objects. | Identifying, shading and labelling fractions of wholes.                   | Represent fractions using geometric cut outs and diagrams.<br><br>Calculate fractions of the number of objects in sets. | Working in groups.<br>Sharing objects                  | Identify 1/3, 1/6, and 1/12 of wholes.<br>Shade and label parts of wholes to show thirds, sixths and twelfths. | Fold, shade and label congruent strips of cardboard/ geometric cut outs to show 1/3, 1/6 and 1/12<br>Shade fractions of wholes e.g. 2/3, 3/3,2/6, 3/6 etc.<br>Finding, 1/3,1/6, and 1/12 of sets of objects and writing number sentences to show<br>e.g. 1/3 of 6 = 2<br>1/6 of 6 = 1<br>1/12 of 24= 2 | Shade 1/3, 1/6 and 1/12 of wholes.<br><br>Find:<br>1/3 of 15 =<br>1/6 of 12 =<br>1/12of 12 =   | Language Skills<br>Spell number names for fractions e.g. one third, two sixths, three twelfths etc..                         |
| Addition of unit Fractions with like denominators         | .Adding unit fractions<br>Shading diagrams<br>Writing.<br>Folding strips. | Add unit fractions with like denominators   | Appreciate quality work.<br>Render services to others. | Addition of unit fractions with like denominators resulting in answers not greater than 1.<br>e.g. 1/3 + 1/3   | Shade, using strips to show addition of unit fractions with like denominators<br>Writing number sentence to show what was done<br>e.g. 1/3 + 1/3 = 2/3<br>1/6 + 1/6 = 2/6  | Fold and shade strips to show given fractions<br>1/5+ 2/5<br>2/3 + 1/3<br>Write number sentence e.g.<br>1/4 + 1/4 = 2/4<br>2/3 + 1/3 = 3/3 | Craft<br>Make and use Chinese Tangrams<br><u>Art</u><br>Drawing patterns and colouring various parts with different colours. |
| Subtraction of fractions with like denominators.          | Drawing Diagrams<br>Writing number sentences<br>Solving problems          | Subtract unit fractions with like denominators  | Transfer learning to solve problems in every day life  | Subtraction of unit fractions with like denominators.  | Display diagrams with shaded parts.<br>Write number sentences to show unshaded parts e.g.<br>   | Draw diagrams and write number sentences to show the following<br>6/6 – 1/6 = 5/6<br>8/8 – 7/8 = 1/8<br>7/7 – 4/7 = 3/7                    | <u>Language Skills</u> –<br>Write number sentences.  |

| TOPIC   | OBJECTIVE  |   |  | CONTENT  | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION   |
|---|--|---|--|--|---|---|---|
|   | SKILLS   | KNOWLEDGE   | ATTITUDE   |  |   |   |   |
|   |  |   |  |  | $4/4 - 1/4 = 3/4$<br>Solve simple word problems involving subtraction of unit fractions with like denominators.   |   |   |
| Multiplication of unit fractions by whole numbers | Computing<br>Drawing diagrams,<br>Making congruent cut outs of geometrical shapes. | Write down repeated addition using unit fractions.<br>Use repeated addition of unit fractions to multiply unit fractions by whole numbers | Develop creativity in approaches to problem solving. | Multiplication of unit fraction by whole numbers resulting in answers not greater than 1.. | Use repeated addition to multiply unit fractions e.g.<br><br><br>$1/4 + 1/4 + 1/4 = 3/4$<br>Write the number sentence using the multiplication sign.<br>e.g.<br>$3 \times 1/4 = 3/4$ .<br>Solve simple word problems involving multiplication of unit fractions by whole numbers | Complete the following:<br>(a) $2 \times 1/2 =$<br>(b) $4 \times 1/4 =$<br>(c) $3 \times 1/8 =$<br>(d) $5 \times = 5/6$ | <b>Games</b><br>Games involving multiplication of fractions by whole numbers. |

## MEASUREMENT-LENGTH

| TOPIC   | OBJECTIVES   |  |  | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION   |
|---|--|--|--|---|---|---|---|
|   | SKILLS   | KNOWLEDGE  | ATTITUDE   |   |   |   |   |
| MEASUREMENT<br><br>LENGTH- Using non- standard units. | Estimating, measuring and comparing lengths using non – standard units.  | Recognise that non-standard units present problems in measuring.   | Share objects and co-operate with group members. | Non– standard units for length..  | Use length of stretches, spans, , strides etc to measure length of objects.<br>Use length of objects to measure length of other objects.<br>e.g. pencils, leaves, straws, matchstick, string  | Find out how many lengths of a pencil would give the length of a desk.<br>Give length of objects in and out of the classroom using non-standard units.  | Science<br>Use non-standard units to record the heights of pupils in the class and short distances. |
| Standard units of length.                             | Estimating<br>Measuring and comparing lengths in metres or centimetres.<br>Using the appropriate unit, metre or centimetre to measure lengths. | Estimate, measure and compare lengths in metres and centimetres to the nearest whole number.<br>Record distance around objects to the nearest metre. | Express opinions freely.<br><br>" "              | Long lengths or distances are measured in metres.<br>.A standard unit which is used to measure short lengths is the centimetre. | Estimate and measure lengths and distances using a metre strip.<br>Estimate and measure lengths and distances.<br>using 80-centimetre strips.<br>Fold over 80-centimetre strips to estimate and measure in terms of lengths of 40-centimetres.<br>Repeat to estimate and measure in terms of 20 and 10-centimetres. | Estimate and measure length of corridors, chalkboards in metres using an unmarked metre stick.<br>Choose suitable units to measure the length of<br>(a) a pencil<br>(b) a match stick<br>(c) the classroom etc. | <u>Physical Education</u><br>Estimate distance covered in running from one location to another.     |

| TOPIC | OBJECTIVES |           |          | CONTENT | METHODS/<br>STRATEGIES- | EVALUATION | AREAS OF<br>INTEGRATION |
|-------|------------|-----------|----------|---------|-------------------------|------------|-------------------------|
|       | SKILLS     | KNOWLEDGE | ATTITUDE |         |                         |            |                         |
|       |            |           |          |         |                         |            |                         |

### MEASUREMENT-CAPACITY

| TOPIC   | OBJECTIVE   |   |   | CONTENT  | METHODS/<br>STRATEGIES-   | EVALUATION  | AREAS OF<br>INTEGRATION   |                       |                      |
|---|---|---|---|--|---|---|---|-----------------------|----------------------|
|   | SKILLS  | KNOWLEDGE   | ATTITUDE  |  |   |   |   |                       |                      |
| Capacity<br>Non-standard<br>units of capacity | Estimating,<br>Measuring and<br>comparing<br>capacity using<br>non-standard<br>units.   | Estimate,<br>measure and<br>compare capacity<br>using non-<br>standard units. | Co-operate and<br>complete tasks<br>on time.          | Capacity- how<br>much a<br>container<br>holds. | Estimate the capacity of<br>large containers<br>Measure the capacity of<br>large containers using the<br>given non-standard unit.<br>e.g. fill a butter container<br>using a scoop (milk<br>measure). | Use different<br>non-standard<br>units to find the<br>capacity of a<br>given container.   | Science<br>Make and use<br>a rain-gauge.  |                       |                      |
| Capacity in<br>litres and half<br>litres      | Estimating<br>capacity.<br>Measuring and<br>comparing<br>capacity of<br>containers in<br>litres.<br>Recording<br>answers to the<br>nearest litre or<br>half litre | Use standard<br>units of capacity<br>in everyday life..                       | Recognise the<br>value and uses of<br>standard units. | Capacity in<br>litres and in<br>half litre.    | Recall a standard unit of<br>capacity (the litre).<br>Estimate and measure<br>capacity in litres.<br>Record answers on tables   | State the<br>capacity of given<br>containers using<br>non-standard and<br>standard units of<br>measure.<br>Fill one-litre or<br>two -litre<br>containers using<br>the ½ litre<br>measure and<br>state the number<br>of ½ litre<br>measures used to<br>fill the 1- litre<br>and 2-litre<br>containers. | <u>Language</u><br><u>Skills</u><br>Stories on how<br>the need for<br>standard units<br>of capacity<br>began.<br><u>Drama</u> |                       |                      |
|   |   |   |   |  | Containers  |   |   | Estimated<br>Capacity | Measured<br>Capacity |
|   |   |   |   |  | Large<br>bowl   |   |   |                       |                      |
|   |   |   |   |  | Large<br>Tin  |   |   |                       |                      |

| TOPIC  | OBJECTIVE  |   |                                       | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION   |
|--|--|---|---------------------------------------|--|--|--|---|
|  | SKILLS   | KNOWLEDGE   | ATTITUDE                              |  |  |  |   |
|  |  |   |                                       |  |  |  |   |
| The relationship between the litre, 500millilitres and ½ litre | Finding relationship between standard units.<br>Recording and discussing observation.<br>Generalising. | State the relationship between 500millilitres, 1 litre and ½ litre. | Appreciate the use of standard units. | Relationship between the litre, 500 millilitres and ½ litre. | Use containers with a capacity of 500 millilitres to fill containers with a capacity of 1litre.<br>Record and discuss observation. | Demonstrate that 500 millilitres is equal to ½ litre using containers. | <u>Science</u><br>Measuring capacity<br><u>Language</u><br><u>Skills</u><br>Report findings after an investigation. |

### MEASUREMENT-MASS

| TOPIC                                | OBJECTIVE   |   |  | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION  |
|--------------------------------------|---|---|--|--|--|--|--------------------------|
|                                      | SKILLS  | KNOWLEDGE   | ATTITUDE   |  |  |  |                          |
| Mass.<br>Non-standard units of mass. | Arranging objects according to their mass.<br>Estimating, measuring and comparing mass. | Recognise the limitations of non-standard units in measuring mass.. | Co-operate with group members.<br>Practise safe habits in the environment. | Mass is the amount of matter something has.<br>When we are weighing things we are really finding their mass.<br>A balance is used to measure mass. | <ul style="list-style-type: none"> <li>- Estimate the mass of a set of objects of various masses, shapes and sizes.</li> <li>- Estimate and measure the mass of three or more objects and arrange them in ascending and descending order.</li> <li>- Use a sea-saw to estimate and measure the mass of pupils.</li> <li>- Make statements about these findings.</li> </ul> | Use a balance to arrange objects of various masses in ascending/descending order e.g. brick, sand, book, eraser etc. | Science<br>Measure mass  |
| Standard units of mass.              | Weighing objects.   | Estimate, measure and   | Value order in the school and  | Two standard units for   | <ul style="list-style-type: none"> <li>- Introduce a standard unit of measuring</li> </ul>   | Group objects according to   | Science<br>Measure mass. |

| TOPIC  | OBJECTIVE   |   |                                   | CONTENT   | METHODS/<br>STRATEGIES-   | EVALUATION   | AREAS OF<br>INTEGRATION                    |
|--|---|---|-----------------------------------|---|---|--|--|
|  | SKILLS  | KNOWLEDGE   | ATTITUDE                          |   |   |  |  |
|  |   | compare mass in kilograms and half kilograms giving answers to the nearest kilogram, half kilogram. | home.                             | measuring mass are the gram and kilogram.   | <p>mass (kilogram).</p> <ul style="list-style-type: none"> <li>- Measure and compare the mass of a kilogram/half kilogram and the mass of a variety of objects of different sizes and shapes.</li> <li>- Include objects that weigh more than 1 kilogram and let pupils give answers to the nearest kilogram.</li> </ul>  | their mass measured in kilograms e.g. more than 1 kilogram, less than 1 kilogram.  |  |
| The relationship between the kilogram, $\frac{1}{2}$ kilogram and 500 grams. | Measure mass as accurately as possible. Identify the abbreviations for grams and kilograms. | Show the relationship between the kilogram, half kilogram and 500 grams.                            | Enjoy the measurement activities. | <p>Mass – relationships between the kilogram, <math>\frac{1}{2}</math> kilogram and 500 grams.</p> <p>1 kilogram. =1000 grams<br/> <math>\frac{1}{2}</math> kilogram =500 grams</p> <p>The abbreviation for gram is (g) and for kilogram (kg)</p> | <ul style="list-style-type: none"> <li>- Measure mass using half kilogram masses.</li> <li>- Estimate how many half-kilogram masses will be needed to balance one-kilogram mass.</li> <li>- Measure masses that are more or less than half kilogram.</li> <li>- Introduce the unit gram for smaller masses.</li> <li>- Identify the relationship between <math>\frac{1}{2}</math> kilogram mass and 500 grams by balancing one against the other.</li> <li>- Recognise that 1-kilogram is equal to</li> </ul> | <ul style="list-style-type: none"> <li>- Use the symbols</li> <li>- = is equal to</li> <li>- &gt; is greater than</li> <li>- &lt; is less than</li> <li>- to compare the mass of objects e.g. matchstick, coin, brick, book, ruler, chair, nail.</li> <li>- State how many half-kilogram masses are needed to balance one kilogram.</li> </ul> | <u>Science</u> – Investigating the see-saw |

| TOPIC                                  | OBJECTIVE                                 |                                |                                  | CONTENT   | METHODS/<br>STRATEGIES-  | EVALUATION  | AREAS OF<br>INTEGRATION |
|--|---|--------------------------------|----------------------------------|---|--|---|-------------------------|
|  | SKILLS                                    | KNOWLEDGE                      | ATTITUDE                         |   |  |   |                         |
|  |   |                                |                                  |   | 1000 grams and write number sentences to show same.<br>- Use the symbols<br>- = is equal to<br>- > is greater than<br>- < is less than to<br>- compare the mass of objects marked in<br>- 1 kg., ½ kg, 500g  |   |                         |
| Mass of objects in kilograms and grams | Measuring mass as accurately as possible. | Use the gram as a unit of mass | Work together to solve problems. | Estimate, measure and compare the mass of objects in kilograms and grams. | - Use kilograms masses to measure mass to the nearest kilogram.<br>- Using 500-gram/250-gram masses to measure the mass of objects.<br>- Using the symbols<br>- = is equal to<br>- > is greater than<br>- < is less than to compare the mass of objects marked in 500 grams, 250 grams and 1 kilogram. | Use the names below to complete table.                |                         |
|  |   |                                |                                  |   |  | Less than 1 kg  | More than 1 kg          |
|  |   |                                |                                  |   |  | key, pen, mouse, baby, daddy, pig, horse, coin, leaf. |                         |

## MEASUREMENT-TIME

| TOPIC  | OBJECTIVE                         |   |  | CONTENT   | METHODS/<br>STRATEGIES-  | EVALUATION   |   | AREAS OF<br>INTEGRATION |
|--|-----------------------------------|---|--|---|--|--|---|-------------------------|
|  | SKILLS                            | KNOWLEDGE   | ATTITUDE   |   |  | Before<br>Midday   | After<br>Midday   |                         |
| <p><b>TIME</b></p> <p>The 24- hour clock</p> | Reading time on the 24-hour clock | Use the 24-hour clock to read and write time on the hour.<br>- Distinguish between before midday and after midday | Appreciate contribution of others.                     | Time – 24-hour clock  | Read and write time on the hour.<br>- Compare before midday hours with after midday hours<br>-<br>-  | Put in correct columns:<br>Before Midday<br>After Midday   | <u>Language</u><br><u>Skills</u><br>Report on time table activities before midday and after midday assigning time to the activities.  |                         |
|  |                                   |   |  |   |  | (24:00h; 11:00h; 03:00h).<br>(16:00h; 06:00h; 20:00h).   |   |                         |
| The calendar                                 | Reading time                      | Read the calendar and tell the time that has elapsed between days, weeks, and months.                             | Utilise time meaningfully for study, work and leisure. | Time – The calendar<br>Intervals of days, weeks and months. | Read the days of the week from the calendar, identifying and naming the day before and the day after given days. (Include intervals of 1 to 5 days).<br>Read and tell the number of days and approximate weeks in the present month.<br>Name the months of the year. | Complete<br>The day before Tuesday is __.<br>The Month after May is __.<br>Three days after Sunday is __.<br><br>Fill in the missing months:<br>January, March, May, July, __, __. | <u>Language</u><br><u>Skills</u><br>Spell the names of the days of the week and the months of the year.<br>Write poems related to the names of the days of the week and the months of the year. |                         |



| TOPIC                                  | OBJECTIVES   |   |  | CONTENT   | METHODS/<br>STRATEGIES-  | EVALUATION   | AREAS OF<br>INTEGRATION  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
|--|--|---|--|---|--|--|--|------------|-------|-------------|--|-------------|--|-------|--------|-------------|--------|-------|--|-------------|--|-------------|--|-------|--|
|  | SKILLS   | KNOWLEDGE   | ATTITUDE                                 |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
|  |  |   |  |   |  | <table border="1"> <thead> <tr> <th>Money</th> <th>Equivalent</th> </tr> </thead> <tbody> <tr> <td>(\$5)</td> <td>(\$1) (\$1)</td> </tr> <tr> <td></td> <td>(\$1) (\$1)</td> </tr> <tr> <td></td> <td>(\$1)</td> </tr> <tr> <td>(\$10)</td> <td>(\$5) (\$5)</td> </tr> <tr> <td>(\$10)</td> <td>(\$5)</td> </tr> <tr> <td></td> <td>(\$1) (\$1)</td> </tr> <tr> <td></td> <td>(\$1) (\$1)</td> </tr> <tr> <td></td> <td>(\$1)</td> </tr> </tbody> </table> | Money  | Equivalent | (\$5) | (\$1) (\$1) |  | (\$1) (\$1) |  | (\$1) | (\$10) | (\$5) (\$5) | (\$10) | (\$5) |  | (\$1) (\$1) |  | (\$1) (\$1) |  | (\$1) |  |
| Money                                  | Equivalent   |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
| (\$5)                                  | (\$1) (\$1)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
|  | (\$1) (\$1)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
|  | (\$1)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
| (\$10)                                 | (\$5) (\$5)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
| (\$10)                                 | (\$5)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
|  | (\$1) (\$1)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
|  | (\$1) (\$1)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
|  | (\$1)  |   |  |   |  |  |  |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |
| Solving one step and two step problems | Counting money.<br>Recording change<br>Calculating and writing bills | Solve one step and two step problems involving the four operations with money | Share and co-operate with group members. | Problem solving involving one step and two step problems. | <ul style="list-style-type: none"> <li>- Identify and state the value of coins and notes.</li> <li>- Give coins and notes of equivalent value for amounts up to \$100</li> <li>- Shopping problems e.g. find the total cost of pairs of items using</li> </ul> | <ul style="list-style-type: none"> <li>- Solve simple one-step two-step problems involving addition and subtraction.</li> <li>- Make change for amounts up to \$100</li> <li>- Shopping problems involving multiplication</li> <li>- Solve simple problems</li> </ul>  | <b>Social Studies</b><br>Important features of CARICOM States e.g. currency used.<br>Set up and use a shop corner. |            |       |             |  |             |  |       |        |             |        |       |  |             |  |             |  |       |  |

| TOPIC | OBJECTIVES |           |          | CONTENT | METHODS/<br>STRATEGIES-  | EVALUATION          | AREAS OF<br>INTEGRATION |
|-------|------------|-----------|----------|---------|--|---------------------|-------------------------|
|       | SKILLS     | KNOWLEDGE | ATTITUDE |         |  |                     |                         |
|       |            |           |          |         | <p>different combinations<br/>e.g. a pen costing \$120. and a pencil - \$10 can be combined as follows.</p> <p>(1) \$100 + \$20 + \$10 etc. or by drawing the items bought and writing the cost next to each (e.g)</p> <p style="text-align: right;">\$120</p> <p style="text-align: right;"><u>\$ 10</u></p> <p>Total cost <u>\$130</u></p> <p>- Shop and make change for amounts up to \$100<br/>Shopping problems involving addition and subtraction only.</p> <p>- Shopping problems involving multiplication only i.e. to</p> | involving division. |                         |

| TOPIC | OBJECTIVES |           |          | CONTENT | METHODS/<br>STRATEGIES-   | EVALUATION | AREAS OF<br>INTEGRATION |
|-------|------------|-----------|----------|---------|---|------------|-------------------------|
|       | SKILLS     | KNOWLEDGE | ATTITUDE |         |   |            |                         |
|       |            |           |          |         | find the total of more than one item of the same price.<br>Shopping problems involving division - two items only. |            |                         |

### GRAPHS

| TOPIC                       | OBJECTIVE  |   |                                   | CONTENT  | METHODS/<br>STRATEGIES-  | EVALUATION  | AREAS OF<br>INTEGRATION   |
|-----------------------------|--|---|-----------------------------------|--|--|---|---|
|                             | SKILLS   | KNOWLEDGE                                     | ATTITUDE                          |  |  |   |   |
| Pictographs and bar graphs. | Collecting data<br>Displaying information using pictographs and bar graphs.<br>Interpreting information on pictographs and bar graphs. | Represent information using graphs.           | Show appreciation for each other. | Pictographs and bar graphs (vertical or horizontal). | - Collect data and display information<br>- e.g. pets of children  | Collect data and display information using pictographs and bar graphs (include both horizontal and vertical graphs) | Language<br>Skills<br>Spell words used- e.g. pictographs, information etc.<br>Science<br>Collect information from the environment e. g. soil types. |
| Pie chart.                  | Collecting data.<br>Recording information.   | Collect data and read information accurately. | Co-operate with group members.    | Pie chart.   | Observe how a cake (pie) is shared.<br>Introduce the term pie chart.<br>Draw a diagram to show how the pie | - Discuss information on simple pie charts.<br>-  | <u>Art.</u><br>Draw pies divided into various sectors.<br>Colour sectors.   |

| TOPIC | OBJECTIVE |           |          | CONTENT | METHODS/<br>STRATEGIES-   | EVALUATION | AREAS OF<br>INTEGRATION |
|-------|-----------|-----------|----------|---------|---|------------|-------------------------|
|       | SKILLS    | KNOWLEDGE | ATTITUDE |         |   |            |                         |
|       |           |           |          |         | <p>is shared<br/> using terms such as<br/> biggest part,<br/> smallest part, more<br/> than, less than.<br/> Read and interpret<br/> simple pie chart</p> |            |                         |