

**TRIMMED GRADE R OVERVIEW**  
**1. NUMBERS, OPERATIONS AND RELATIONSHIPS**

TOPICS	TERM 3 (32 Days)	TERM 4 (53 Days)
<p>The approach to learning Mathematics should be based on the <b>principles of integration and play-based learning</b>.            A <b>Kinaesthetic approach</b> is used to introduce and develop all Maths concepts in Grade R            Emphasis is on the use of Maths Language and this should be integrated into Greeting, Free play, Teacher directed and routine times.            Development that is an integral part of <b>emergent numeracy includes cognitive development</b> (problem-solving, logical thought and reasoning), <b>language development</b> (the language of mathematics) and <b>perceptual-motor</b> as well as <b>emotional and social development</b></p>		
<b>COUNTING:</b>		
<b>1.1</b> <b>Count objects</b>	<b>Number range: 1 - 6</b> <ul style="list-style-type: none"> <li>One-to-one correspondence</li> <li>Count and estimate in ones using concrete objects</li> <li>Practical activities involving many/few and more/less</li> </ul>	<b>Number range: 0- 10</b> <ul style="list-style-type: none"> <li>One-to-one correspondence</li> <li>Count and estimate in ones using concrete objects</li> <li>Practical activities involving of many/few, more/less and most /least</li> </ul>
<b>1.2</b> <b>Count forwards and backwards</b>	<b>Number range: 1- 6</b> <ul style="list-style-type: none"> <li>Incidental counting using number rhymes/songs/counters/body parts and percussion.</li> <li>Counting in ones</li> </ul>	<b>Number range: 0-10</b> <ul style="list-style-type: none"> <li>Incidental counting using number rhymes/songs/counters/body parts and percussion.</li> <li>Counting with number ladder</li> <li>Counting in ones and twos</li> </ul>
<b>1.3</b> <b>Number symbols and number names</b>	<b>Number range: 1 to 6</b> <b>Recognise and identify ...</b> <ul style="list-style-type: none"> <li>number symbols 1 to 6</li> </ul> <b>Recognise...</b> <ul style="list-style-type: none"> <li>number names one to six</li> </ul>	<b>Number range: 0 to 10</b> <b>Recognise and identify ...</b> <ul style="list-style-type: none"> <li>number symbols 0 to 10</li> </ul> <b>Recognise...</b> <ul style="list-style-type: none"> <li>number names zero to ten</li> </ul>
<b>NUMBER RECOGNITION:</b>		

<b>1.4</b> <b>Describe, compare and order numbers</b>	<b>Use numbers in familiar contexts:</b> <ul style="list-style-type: none"> <li>Learners age, address, house number and parents cell phone number</li> <li>Identify numbers in pictures and dot cards</li> </ul>	<b>Use numbers in familiar contexts:</b> <ul style="list-style-type: none"> <li>Learners age, address, house number and parents cell phone number</li> <li>Identify numbers in adverts/flyers, old birthday cards etc.</li> </ul>
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**NUMBER SENSE: (Relationships)**

<b>1.5</b> <b>Describe, compare and order numbers</b>  <b>Ordinal Numbers</b>	<b>Number range: 1 – 6</b> <ul style="list-style-type: none"> <li>Identifies and describes whole numbers up to 6.</li> <li>Compares which of two given collection of objects are: <ul style="list-style-type: none"> <li>Big and small</li> <li>Bigger and smaller</li> <li>Biggest and smallest</li> </ul> </li> <li>Orders more than two given collections of objects: biggest to smallest and smallest to biggest.</li> </ul> <p>Compares which of two given collections of objects:</p> <ul style="list-style-type: none"> <li>More than</li> <li>Less than</li> <li>Equals to (the same)</li> </ul> <p><b>Incidentally</b> develop awareness of first, second, third, fourth and fifth, last and next during Greeting, Refreshment, toilet routines and Life skills activities.</p>	<b>Number range: 1 – 10</b> <ul style="list-style-type: none"> <li>Identifies and describes whole numbers from 0 to 10.</li> <li>Compares which of two given collection of objects are: <ul style="list-style-type: none"> <li>Big and small</li> <li>Bigger and smaller</li> <li>Biggest and smallest</li> </ul> </li> <li>Orders more than two given collections of objects: biggest to smallest and smallest to biggest.</li> </ul> <p>Compares which of two given collections of objects:</p> <ul style="list-style-type: none"> <li>More than</li> <li>Less than</li> <li>Equals to (the same)</li> </ul> <p><b>Incidentally</b> develop awareness of first, second, third, fourth fifth and sixth, last and next during Greeting, Refreshment, toilet routines and Life skills activities</p>
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**SOLVE PROBLEMS IN CONTEXT:**

<b>1.6</b> <b>Problem-solving techniques</b>	<b>Uses the following techniques:</b> <ul style="list-style-type: none"> <li>concrete apparatus e.g. counters</li> <li>Physical number ladder</li> </ul>	<b>Uses the following techniques</b> <ul style="list-style-type: none"> <li>Concrete apparatus e.g. counters</li> <li>Physical number ladder</li> </ul>
<b>1.7</b> <b>Addition and subtraction</b>	<b>Orally solve word problems [story sums] and explains own solution to problems involving:</b> <ul style="list-style-type: none"> <li>Use counters and orally solve problems that involve numbers 2,3,4,5 and 6.</li> </ul>	<b>Orally solve word problems [story sums] and explains own solution to problems involving:</b> <ul style="list-style-type: none"> <li>Use counters and orally solve problems that involve numbers 7, 8,9,10 and 0.</li> </ul>

<b>1.9</b> <b>Grouping and sharing leading to division</b>	<b>Orally solve word problems [story sums] and explains own solution to problems involving:</b> <ul style="list-style-type: none"> <li>• Use counters and orally solve problems that involve equal sharing, grouping with whole numbers up to <b>6</b></li> </ul>	<b>Orally solve word problems [story sums] and explains own solution to problems involving:</b> <ul style="list-style-type: none"> <li>• Use counters and orally solve problems that involve equal sharing, grouping with whole numbers up to <b>10</b></li> </ul>
<b>1.11</b> <b>Money</b>	<b>Money</b> <ul style="list-style-type: none"> <li>• Develop an awareness of South African coins (20c, 50c, R1, R2, R5)</li> <li>• Identify colours, animals, similarities and differences</li> <li>• Sort according to colour and size</li> </ul>	<b>Money</b> <ul style="list-style-type: none"> <li>• Develop an awareness of South African bank notes. R10, R20, R50, R100, R200</li> <li>• Identify colours, similarities and differences</li> <li>• Sort according to colour and size</li> </ul>

<b>CALCULATION USING:</b> <b>NB: Calculations (1.12 -1.13) should not be taught in isolation but integrated with solving problems in context (1.6 – 1.9)</b>		
<b>1.12</b> <b>Techniques (methods or strategies)</b>	<b>Uses the following techniques when performing functions</b> <ul style="list-style-type: none"> <li>• concrete apparatus e.g. counters</li> <li>• Physical number ladder</li> </ul>	<b>Uses the following techniques when performing functions</b> <ul style="list-style-type: none"> <li>• concrete apparatus e.g. counters</li> <li>• Physical number ladders</li> </ul>
<b>1.13</b> <b>Addition and subtraction</b>	<b>Orally solves:</b> <ul style="list-style-type: none"> <li>• Addition and subtraction problems up to 6</li> </ul>	<b>Orally solves:</b> <ul style="list-style-type: none"> <li>• Addition and subtraction problems up to 10</li> </ul>
<b>Mental mathematics</b>	<b>MENTAL MATHEMATICS INTEGRATED INTO ALL TOPICS</b>	

**GRADE R OVERVIEW**  
**2. PATTERNS, FUNCTIONS AND ALGEBRA**

TOPIC	TERM 3	TERM 4
<b>2.1 Geometric patterns</b>	<ul style="list-style-type: none"> <li>• Identify patterns in their environment</li> <li>• Copy patterns using body percussion</li> <li>• Copy and complete patterns using physical objects</li> <li>• Copy, complete and create own patterns (introduce drawings)</li> <li>• Copy, complete and extend own patterns</li> </ul>	<ul style="list-style-type: none"> <li>• Copy, extend and create own pattern with pictures</li> <li>• Copy, extend and creates own auditory patterns.</li> <li>• Copy a noise pattern like clapping games.</li> <li>• Play games with patterns like “hop scotch”</li> </ul>

**GRADE R OVERVIEW**  
**3. SPACE AND SHAPE (GEOMETRY)**  
Language of position can be integrated into Home Language and Life Skills activities.  
Many of these activities can be offered during Free play (inside and outside) and small group times.

TOPIC	TERM 3	TERM 4
<b>3.1 Position, orientation and views</b>  <p style="text-align: center;"><b>and</b></p> <b>Follow directions</b>	<p><b>THE LEARNERS MUST EXPERIENCE SPATIAL RELATIONSHIPS PRACTICALLY FIRST.</b></p> <p><b>Core/Key language:</b></p> <ul style="list-style-type: none"> <li>• The position of two or more objects in relation to the learner: (In front of and behind, on, on top, under and below, up and down, next to and between, on and under).</li> <li>• The position of two or more objects in relation to each other and to one another: (Bottom and below, next to, middle, left and right)</li> <li>• Symmetry: (Crossing the midline through counting, songs, rhymes and actions).</li> </ul>	

<p><b>3.2</b> <b>3-D and 2-D objects</b></p> <p><b>Builds 3-D objects using concrete materials</b></p>	<p><b>Recognise, identifies and name 3-D objects in the classroom:</b></p> <ul style="list-style-type: none"> <li>• Introduce and explore: <ul style="list-style-type: none"> <li>- ball shapes</li> <li>- box shapes</li> </ul> </li> </ul> <p><b>Describe, sort and compares 3-D objects and 2-D shapes in terms of:</b></p> <ul style="list-style-type: none"> <li>- size</li> <li>- colour</li> <li>- shape</li> <li>- objects that roll</li> <li>- objects that slide</li> </ul> <p>Sorts according to similarities and differences:</p> <ul style="list-style-type: none"> <li>- size</li> <li>- colour</li> <li>- shape</li> </ul> <ul style="list-style-type: none"> <li>• Explore with building materials during Free play activities (indoor and outdoor)</li> <li>• Introduce coping from given construction example and from picture card.</li> </ul>	<p><b>Describe, sort and compares 3-D objects and 2-D shapes in terms of:</b></p> <ul style="list-style-type: none"> <li>- size</li> <li>- colour</li> <li>- shape</li> <li>- objects that roll</li> <li>- objects that slide</li> </ul> <p>Sorts according to similarities and differences:</p> <ul style="list-style-type: none"> <li>- size</li> <li>- colour</li> <li>- shape</li> </ul> <ul style="list-style-type: none"> <li>• Explore with building materials during Free play activities (indoor and outdoor)</li> <li>• Introduce coping from given construction example and from picture card.</li> </ul>
<p><b>3.3</b> <b>2-D shapes</b></p> <p><b>How to build puzzles</b></p> <p><b>2-D shapes</b></p>	<p><b>Recognise, identifies and name 2-D shapes in the classroom:</b></p> <ul style="list-style-type: none"> <li>- Learners symbols and names</li> <li>- Classroom labels</li> </ul> <p>Learners complete 12 -18 piece puzzles</p> <p><b>Figure- ground perception activities:</b></p> <ul style="list-style-type: none"> <li>- Sorting, matching and grouping of objects and shapes through daily routines</li> </ul> <p><b>Geometric shapes:</b> Introduce -</p> <ul style="list-style-type: none"> <li>- circle</li> <li>- triangle</li> <li>- square</li> </ul>	<p><b>Recognise, identifies and name 2-D shapes in the classroom:</b></p> <ul style="list-style-type: none"> <li>- Learners names</li> <li>- Classroom labels</li> </ul> <p>Learners complete 24 piece puzzles</p> <p><b>Figure- ground perception activities:</b></p> <ul style="list-style-type: none"> <li>- Sorting, matching and grouping through daily routines.</li> </ul> <p><b>Geometric shapes:</b> Reinforce -</p> <ul style="list-style-type: none"> <li>- circle</li> <li>- triangle</li> <li>- square</li> <li>- rectangle</li> </ul>

## GRADE R OVERVIEW

### 4. MEASUREMENT

“Time” can be dealt with continuously during Greeting times through the weather chart, day and date chart, birthday chart and sequence of the Daily Programme.

TOPICS	TERM 3	TERM 4
<b>4.1 Time</b>	<ul style="list-style-type: none"> <li>• Introduce both concepts of day/night and dark/light</li> <li>• Morning, afternoon and tonight</li> <li>• Sequence recurring events in own daily life</li> </ul>	<ul style="list-style-type: none"> <li>• Sequence recurring events in own daily life</li> </ul>
<b>4.2 Length</b>	<p>Concretely compare and order objects, using appropriate vocabulary to describe length. Long/short, longer/shorter, longest/shortest, tall, taller and tallest</p> <ul style="list-style-type: none"> <li>• Estimate and measure length of objects by using hands, feet, piece of string etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimate and measure length of objects by using hands, feet, piece of string etc.</li> <li>• Introduce tape measure for measuring</li> </ul>

## GRADE R OVERVIEW

### 5. DATA HANDLING

The attendance register, weather and birthday charts and are done daily, giving many opportunities for working with Data Handling.

The teaching of 3-D objects and 2-D shapes can be integrated into the teaching of data handling skills”

TOPICS	TERM 3	TERM 4
<b>5.1 Collect and sort objects</b>	<ul style="list-style-type: none"> <li>• Collect physical objects of a similar kind</li> <li>• Sort objects according to <b>one</b> attribute e.g. size</li> </ul>	<ul style="list-style-type: none"> <li>• Collect physical objects of a similar kind</li> <li>• Sort objects according to <b>one</b> attribute e.g. size</li> </ul>
<b>5.2 Represent sorted collections of objects</b>	<ul style="list-style-type: none"> <li>• Make use of real objects to make a graph e.g. blocks, shapes, stacking cubes or Lego.</li> <li>• Introduce pictograph</li> </ul>	<ul style="list-style-type: none"> <li>• Make use of real objects to make a graph e.g. blocks, shapes, stacking cubes or Lego.</li> <li>• Draw a pictograph using data collected.</li> </ul>

**5.3**  
**Discuss and report**  
**on**  
**sorted collections of**  
**objects**

- “Read” and interpret concrete graphs using questions e.g. How many big leaves did you draw? Which are the most/least?

- “Read” and interpret graphs using questions.
- Learners will be able to explain their findings by interacting with the graph while answering questions e.g. which objects are more/less, which colour is the most popular/ unpopular, which method of transport is used the most. etc,