## Mathletics <br> South Africa National Curriculum Skill Quests



Grades 1-2
February 2023

## Mathletics

South Africa Program of Studies
Skill Quests
February 2023
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## Grade 1

## 1 Numbers, Operations and Relationships

| Topic | Quests | Content |
| :---: | :---: | :---: |
| Count objects | Count objects | Counting objects up to 100 |
| Count forwards and backwards | Count forwards \& backwards | Counting up \& back in 1s |
|  |  | Counting up \& back in 2 s |
|  |  | Counting up \& back in 5 s |
|  |  | Counting up \& back in 10 s to 50 |
|  |  | Counting up \& back in 10s to 100 |
|  |  | Counting in $2 \mathrm{~s}, 5 \mathrm{~s}$ \& 10 s up to 100 |
| Number symbols and number names | Number symbols \& number names | Names \& symbols |
| Describe, compare and order numbers | Describe, compare \& order numbers | Comparing numbers to 20 |
|  |  | Ordinal numbers |
| Place value | Place value | Partitioning numbers to 100 |
|  |  | Representing 2-digit numbers |
|  |  | Identifying the value of digits |
|  |  | Solving problems with place value |
| Addition and subtraction | Problem solving: addition \& subtraction | Addition \& subtraction problems |
| Repeated addition leading to multiplication | Problem solving: repeated addition | Repeated addition to 20 |
| Grouping and sharing leading to division | Problem solving: grouping and sharing | Grouping to 20 |
|  |  | Sharing to 20 |
| Addition and subtraction | Addition \& subtraction | Adding up to 9 |
|  |  | Addition in any order |
|  |  | Adding zero |
|  |  | Adding by bridging to 10 |
|  |  | Adding using doubles |
|  |  | Adding up to 20 |
|  |  | Finding the difference |
|  |  | Subtracting zero |
|  |  | Fact families, addition \& subtraction |
|  |  | Adding \& subtracting to 20 fluently |
|  | Number bonds to 10 | Recognising \& recalling number bonds to 10 |
| Repeated addition leading to multiplication | Multiplication | Repeated addition |
| Mental mathematics | Number concept | Numbers before \& after |
|  |  | Ordering numbers to 20 |
|  | Recall number bonds to 10 | Rapid recall of number bonds to 10 |


|  | Calculation strategies | Adding doubles \& near <br> doubles |
| :--- | :--- | :--- |
|  |  | Subtracting using doubles <br> Mental strategies for addition <br> \& subtraction |

## 2 Patterns, Functions and Algebra

| Topic | Quests | Content |
| :---: | :---: | :---: |
| Geometric patterns | Geometric patterns | Recognising repeating patterns |
|  |  | Completing repeating patterns |
|  |  | Creating repeating patterns |
| Number patterns | Number patterns | Repeating number patterns |
|  |  | Odd \& even patterns |
|  |  | Additive patterns |
|  |  | Growing \& shrinking patterns |

## 3 Space and Shape (Geometry)

| Topic | Quests | Content |
| :--- | :--- | :--- |
| Position, orientation and views |  <br> views | Describing position |
|  |  | Left \& right |
| 2-D shapes | 2-D shapes |  <br> squares |
| Symmetry | Symmetry | Recognising lines of symmetry |

## 4 Measurement

| Topic | Quests | Content |
| :---: | :---: | :---: |
| Time | Time | Days of the week |
|  |  | Months of the year |
|  |  | Calendars |
| Length | Length | Length |
| Mass | Mass | Mass |
|  |  | Comparing mass |
|  |  | Comparing \& ordering masses |
| Capacity/volume | Volume | Introducing volume |
|  |  | Estimating, comparing \& ordering volumes |
| Represent sorted collection of objects | Sort \& represent data | Introducing tally charts |
| Collect and organise data | Collect \& use data | Asking questions to collect data |
|  |  | Using \& ordering data |
| Represent data | Represent data in simple displays | Representing data using simple displays |
| Analyse and interpret data | Interpret basic data displays | Interpreting basic data displays |

## Grade 2

1 Numbers, Operations and Relationships

| Topic | Quests | Content |
| :---: | :---: | :---: |
| Count objects | Count objects | Counting collections |
| Count forwards and backwards | Count in 1s | Counting up \& back in 1s up to 50 |
|  |  | Counting forwards \& backward in 1s to 100 |
|  |  | Counting up \& back in 1s to 200 |
|  | Count in 2 s | Counting in 2 s up to 50 |
|  |  | Counting up \& back in 2 s to 100 |
|  |  | Counting in 2 s up to 200 |
|  | Count in 5s | Counting in 5 s up to 50 |
|  |  | Counting in 5 s up to 100 |
|  |  | Counting in 5 s up to 200 |
|  | Count in 10s | Counting up in 10s up to 100 |
|  |  | Counting back in 10 s within 100 |
|  |  | Counting forwards \& backwards in 10 s within 100 |
|  |  | Counting in 10s up to 200 |
|  | Count in 3s | Counting forwards \& backwards in 3 s within 30 |
|  |  | Counting in 3 s up to 30 from any multiple |
|  |  | Counting forwards \& backwards in 3s within 100 |
|  | Counting in 4s | Counting up \& back in 4s within 40 |
|  |  | Counting up \& back in 4 s up to 100 |
| Number symbols and number names | Number symbols \& number names | Number names \& numerals up to 100 |
| Describe, compare and order numbers | Describe, compare \& order numbers | Comparing \& ordering numbers up to 50 |
|  |  | Comparing \& ordering numbers up to 100 |
|  | Ordinal numbers | Ordinal numbers |
| Place value | Recognise place value | Partitioning 2-digit numbers |
|  |  | Solving problems with place value |
| Addition and subtraction | Addition \& subtraction problems | Solving addition \& subtraction word problems |
| Repeated addition leading to multiplication | Multiplication \& division problems | Multiplication \& division problems (2, 5, 10) |
| Grouping and sharing leading to division | Grouping \& sharing problems | Multiplication problems |
|  |  | Division problems |


|  |  | Multiplication \& division problems (2, 5, 10) |
| :---: | :---: | :---: |
| Addition and subtraction | Addition \& subtraction to 20 | Adding \& subtracting to 20 |
|  |  | Adding \& subtracting with missing numbers to 20 |
|  | Addition to 100 | Adding within 100 using jump strategy |
|  |  | Adding within 100 using split strategy |
|  |  | Adding within 100 using mixed strategies |
|  | Subtraction within 100 | Subtracting within 100 using jump strategy |
|  |  | Subtracting within 100 using split strategy |
|  |  | Subtracting two 2-digit numbers using addition |
|  |  | Subtracting within 100 using mixed strategies |
|  | Addition \& subtraction within 100 | Add \& subtract within 100 using various strategies |
|  |  | Using number sense in addition \& subtraction |
|  |  | Equivalent addition \& subtraction number sentences |
| Repeated addition leading to multiplication | Strategies for multiplying | Introducing \& describing arrays |
|  |  | The commutative property of multiplication |
|  |  | Using repeated addition to multiply |
|  |  | Multiplying by 1 or 0 |
| Mental mathematics | Number concept up to 100 | Ordering numbers to 100 |
|  |  | Numbers before \& after |
|  | Add \& subtract mental calculations | Adding \& subtracting tens |
|  |  | Number bonds to 20 |
|  | Strategies for addition \& subtraction | Counting on \& back using a number line |
|  |  | Adding by counting on from the largest number |
|  |  | Fact families addition \& subtraction |
|  |  | Adding doubles |
|  |  | Subtracting doubles |
|  |  | Adding by selecting an efficient strategy |
|  |  | Subtracting by selecting an efficient strategy |
|  |  | Adding \& subtracting efficiently |
|  |  | Adding by partitioning using a number line |
|  |  | Subtracting by partitioning using a number line |


|  |  | Adding \& subtracting by using <br> a number line |
| :--- | :--- | :--- |
|  | Understanding the meaning of <br> fraction symbols |  |
| Fractions | Introduction to <br> fractions | Quarters of objects, sets or <br> shapes |
|  | Finding halves \& quarters |  |
|  | Halves \& quarters of linear <br> models or sets |  |
|  | Introducing thirds |  |
|  | Introducing fifths |  |
|  | Recognising patterns |  |

## 2 Patterns, Functions and Algebra

| Topic | Quests | Content |
| :--- | :--- | :--- |
| Geometric patterns | Geometric patterns | Manipulating patterns |
|  |  |  |
|  |  |  |
| Number patterns | Number patterns | Odd \& even patterns |
|  |  | Growing patterns |
|  |  |  |

## 3 Space and Shape (Geometry)

| Topic | Quests | Content |
| :--- | :--- | :--- |
| Position, orientation and views |  <br> views | The language of position |
|  | Following \& giving directions |  |
| 3-D objects | 3-D shapes/objects | 3-D shapes/objects (edges, <br> vertices \& faces) |
|  |  | Introducing spheres |
|  |  | Introducing cones |
|  |  | Introducing cubes |
| 2-D shapes | 2-D shapes | Sorting 2-D shapes |
| Symmetry | Symmetry | Recognising lines of symmetry |

## 4 Measurement

| Topic | Quests | Content |
| :---: | :---: | :---: |
| Time | Months, weeks \& days | Days of the week |
|  |  | Months of the year |
|  |  | Calendars |
|  | Tell the time | Telling time to the hour |
|  |  | Telling time to the half hour |
|  |  | Telling time to the quarter hour |
| Length | Length | Informal measuring |
| Mass | Mass | Comparing \& ordering mass using pan balance |
|  |  | Comparing \& ordering masses using informal units |
|  |  | Introducing formal units: kilograms |
| Capacity/volume | Volume | Comparing \& ordering containers |
|  |  | Comparing \& ordering volumes of models of blocks |
|  |  | Comparing \& ordering volumes through displacement |
|  |  | Introducing volume \& capacity (L) |
| Represent data | Represent data | Pictographs |
| Analyse and interpret data | Interpret data | Introducing pictographs |

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# For more information about Mathletics, contact our friendly team. 

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