



KNES Primary School Course Outline Year 4 Term 2

Numeracy Tem Overview

During this term topics that will be covered include:

Place Value, Addition, Subtraction, Multiplication, Division, 2D Shapes, Weight, Time, Handling Data.

There will also be weekly tables and mental arithmetic tests to consolidate basic number skills. Homework will also be given daily and non-completion of homework will affect the student's final mark.

Class Rules:

Students, please remember:

- If you are absent, it is your responsibility to get your homework assignment from a classmate and submit it when you return.
- Homework left at home will be considered as not being done.
- If you miss a test or deadline on an assignment, you will receive 0% unless you can provide a letter from a medical doctor to show you were not able to attend.
- It is your responsibility to come to class with the necessary books and other items- they are of no value to you sitting at home.
- You are to use washrooms before school and during scheduled breaks. You are not to be asking to leave class to use the washroom except in 'emergencies' which should not occur often.
- When you hear the bell at the start of the day or at breaktime, line up immediately.
- Be sure to buy food in the cafeteria before the last minutes of your break; you cannot bring the food and/or drink into class.

Unit Outline Mathematics

Week	Task/Topic/Area	Learning Outcome. Students will be able to:-
1	<p>Understanding + and –</p> <p>Mental calculation strategies (+ and -) Addition</p> <p>Pages 18 - 22</p>	<ul style="list-style-type: none"> • Partition into tens and units, adding the tens first. • Identify near doubles, using known doubles (e.g. 150 + 160). • Add or subtract the nearest multiple of 10, then adjust. • Use known number facts and place value to add mentally, including any pair of two-digit whole numbers.
2	<p>Understanding + and –</p> <p>Mental calculation strategies (+ and -) Subtraction.</p> <p>Pages 29 - 33</p>	<ul style="list-style-type: none"> • Find a small difference by counting up (e.g. 5003 - 4996). • Count on or back in repeated steps of 1, 10 or 100. • Add or subtract the nearest multiple of 10, then adjust. • Use known number facts and place value to subtract mentally, including any pair of two-digit whole numbers.
3	<p>Measures, including problems. Weight.</p> <p>Pages 95 - 98</p>	<ul style="list-style-type: none"> • Use, read and write standard metric units (kg, g), including their abbreviations. • Know and use the relationships between familiar units of mass. • Know the equivalent of one half, one quarter, three quarters and one tenth of 1kg in g. • Record estimates and readings from scales to a suitable degree of accuracy.
4	<p>Measures, including problems. Time.</p> <p>Pages 85 - 87</p>	<ul style="list-style-type: none"> • Use, read and write the vocabulary related to time. • Read the time from an analogue clock to the nearest minute, and from a 12-hour digital clock. • Use am and pm and the notation 9:53
5	<p><i>Shape and space</i></p> <p>Reasoning about shapes.</p> <p>2D Shapes.</p> <p>Pages 107 - 109</p>	<ul style="list-style-type: none"> • Describe and visualise 2-D shapes, including the heptagon. • Recognise equilateral and isosceles triangles. • Classify polygons using criteria such as number of right angles, whether or not they are regular, symmetry properties. • Make shapes: for example, construct polygons by paper folding or using pin board, and discuss properties such as lines of symmetry
5	<p>Properties of numbers</p> <p>Reasoning about numbers. Negative numbers.</p> <p>Pages 80 - 82</p>	<ul style="list-style-type: none"> • Recognise multiples of 2, 3, 4, 5 and 10, up to the tenth multiple. • Recognise negative numbers in context (e.g. on a number line, on a temperature scale).
6	<p>Understanding \times and \div</p>	<ul style="list-style-type: none"> • Extend understanding of the operations of \times and \div, and their

	<p>Mental calculation strategies</p> <p>(\times and \div)</p> <p>Multiplication and Division by 8.</p> <p>Pages 45 -47, 51</p>	<p>relationship to each other and to + and -.</p> <ul style="list-style-type: none"> • Begin to derive division facts from the 6, 7, 8 and 9 times tables. • Use doubling or halving, starting from known facts. For example: double/halve two-digit numbers by doubling/halving the tens first; to multiply by 4, double, then double again; to multiply by 5, multiply by 10 then halve; to multiply by 20, multiply by 10 then double. • Partition (e.g. $23 \times 4 = (20 \times 4) + (3 \times 4)$).
7	<p>Understanding \times and \div</p> <p>Mental calculation strategies</p> <p>(\times and \div)</p> <p>Division. Pages 52 - 55</p>	<ul style="list-style-type: none"> • Extend understanding of the operations of \times and \div, and their relationship to each other and to + and -. • Begin to know multiplication facts for 6, 7, 8 and 9 times tables and derive corresponding division facts. • Check with the inverse operation
8	<p>Fractions and decimals.</p>	<ul style="list-style-type: none"> • Understand decimal notation and place value for tenths and hundredths, and use it in context. For example: order amounts of money; convert a sum of money such as £13.25 to pence, or a length such as 125cm to metres; round a sum of money to the nearest pound. • Recognise the equivalence between the decimal and fraction forms of one half and one quarter, and tenths such as 0.3
9	<p>Handling data. Pages 122 - 123</p>	<ul style="list-style-type: none"> • Solve a problem by collecting quickly, organising, representing and interpreting data in tables, charts, graphs and diagrams, including those generated by a computer, for example: Venn and Carroll diagrams (two criteria).
10	<p>Review / Exam week</p>	<ul style="list-style-type: none"> • Review material to be prepared for the exam. • Students will be tested on all topics covered during the term
11	<p>Remedial Work</p>	

Term Assessment Table for Mathematics

<u>Assessment/ Exam</u>	<u>Description</u>	<u>% of term mark</u>
<u>Assessment 1.</u>	Mental Maths: Every week, except for test weeks	<u>10%</u>
<u>Assessment 2</u>	<u>Quizzes- Units of work covered</u>	<u>20%</u>
<u>Assessment 3</u>	<u>Posters- 2D shapes/Fractions/Maths language (Rubrics to follow)</u>	<u>10%</u>
<u>During complete term</u>	<u>Participation in classroom exercises and open discussions.</u>	<u>5%</u>
<u>During complete term</u>	<u>Completion of all Homework</u>	<u>5%</u>
<u>End of term Exam</u>	For the final exam students will be tested on all the topics covered during the term.	<u>50%</u>