



KNES Primary School Course Outline Year 6 Term 1 Mathematics

Term Overview.

This term Year 6 students will deal mostly with place value, ordering and rounding; using a calculator, mental calculation strategies, pencil and paper procedures, money and real life problems, fractions, decimals and percentages; ratio and proportion, handling data, classifying shapes, measures and properties of numbers.

We will be using the New Heinemann Mathematics Textbooks. These will be supplemented by other resources from the library and the internet. Mathematics will be enhanced by interactive math games.

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 Numeracy

Unit	Task/Topic/Area	Learning Outcome. Students will be able to:-
1	Place value, ordering and rounding Using a calculator	<ul style="list-style-type: none"> • Multiply and divide (Ext = including decimals), mentally by 10,100 and 1000. • Use the correct vocabulary for estimation and approximation. • Round an integer to the nearest 10,100 and 1000 (Ext = rounding to the nearest whole number and decimal place)
2	Mental calculation strategies involving addition and subtraction Pencil and Paper addition and subtraction	<ul style="list-style-type: none"> • Identify near doubles such as $1.5 + 1.6$ • Add or subtract the nearest multiple of 10, 100 or 1000, then adjust • Add several numbers • Use known number facts and place value to consolidate mental + and -
3	Fractions, decimals and percentages	<ul style="list-style-type: none"> • Order fractions and position on a number line with a common denominator • Find tenths and hundredths of numbers • Change an improper fraction to a mixed number • Begin to convert a fraction to a decimal using division • Recognize when 2 fractions are equivalent • Use decimal notation for tenths and hundredths • Recognize the equivalence of fractions and decimals
4	Ratio and proportion	<ul style="list-style-type: none"> • Understand the concepts of ratio and proportion e.g. One in every... • Simplify given ratios • Divide a quantity into a given ratio
5	Assess and review Handling data	<ul style="list-style-type: none"> • Solve a problem by interpreting data in tables, graphs, charts and diagrams • Find the mode and range of a set of data • Begin to find the median and mean of a set of data
6	Reasoning about shapes	<ul style="list-style-type: none"> • Classify quadrilaterals • Recognize and estimate angles • Make shapes with increasing accuracy
7	Measures involving area and	<ul style="list-style-type: none"> • Read and record from scales to a suitable

	perimeter	<p>degree of accuracy</p> <ul style="list-style-type: none"> • Calculate the perimeter and area of simple compound shapes • Use, read and write standard metric units • Convert between metric units • Select suitable units to estimate or measure length, mass or capacity • Measure and draw lines to the nearest millimetre
8	Money and real life problems	<ul style="list-style-type: none"> • Solve money problems, calculating change and shopping bills
9	Mental calculation strategies involving multiplication and division Pencil and paper multi and division	<ul style="list-style-type: none"> • Double and half with accuracy • Understand how to multiply by 25 • Use factors • Multiply a double digit by a single digit number using partitioning • Use the relationship between multiplication and division
10	Catch up week (2 day week)	
11	Properties of number	<ul style="list-style-type: none"> • Recognize and extend number sequences, including square and triangular numbers • Recognize prime numbers to at least 20 • Use the vocabulary of comparing and ordering numbers including symbols • Find the difference between a negative and a positive number
12	Problem solving and using a calculator Making decisions and checking results	<ul style="list-style-type: none"> • Develop calculator skills and use a calculator effectively • Check with the inverse operation when using a calculator
13	Review week	
14	End of term exam	

Term Assessment Table for Numeracy

	Description	% of term mark
Assessment 1	Weekly mental arithmetic tests. Each Thursday students will be given a mental arithmetic test	10% of final term grade
Assessment 2	Week 5 assess and review, number skills	10%
Assessment 3	Topic assessments (Heinemann)	10%
Assessment 4	On - going checkups throughout the term	10%
During complete term	Participation in classroom exercises and open discussions.	5%
During complete term	Completion of all Homework	5%
End of term Exam	Number Shape and measures Handling data	50%