

## Objective Letter Year 6

### Revision Objectives for end of Semester Assessments.

#### Maths

##### **Number and Place Value**

- Read, write and order and compare numbers up to 10 000 000 and determine the value of each digit.
- Round any whole number to a required degree of accuracy.
- Solve number and practical problems that involve the above.
- Multiply multi-digit numbers up to 4 digits by a two-digit whole numbers using the formal written method of long multiplication.
- Perform mental calculations, including with mixed operations and large numbers.
- Use their knowledge of the order of operations to carry out calculations involving the four operations

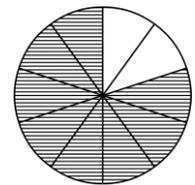
##### **Addition and Subtraction/Multiplication and Division**

- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Solve problems involving addition, subtraction, multiplication and division.
- Use estimation to check answers to calculations and determine, in the context of the problem, an appropriate degree of accuracy
- Divide numbers up to 4 digits by two digit whole numbers using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context



##### **Fractions**

- Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.
- Multiply one-digit numbers with up to two decimal places by whole numbers.
- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- Use common factors to simplify fractions; use common multiples to express fractions in the same denominator
- Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example,  $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ )
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.



## Algebra

- Generate and describe linear number sequences.
- Express missing number problems algebraically.
- Find pairs of numbers that satisfy an equation with two unknowns

## Measurement

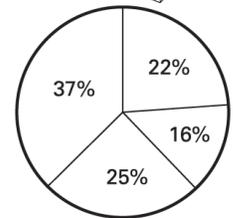
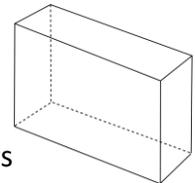
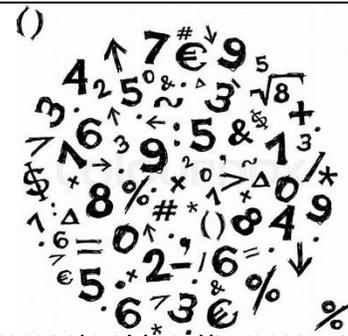
- Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.

## Shape

- Recognise that shapes with the same areas can have different perimeters and vice versa
- Recognise when it is possible to use formulae for area and volume of shapes
- Calculate the area of parallelograms and triangles
- Describe positions on the full coordinate grid (at all four quadrants)
- Draw and translate similar shapes on the coordinate plane, and reflect them in axes

## Statistics

- Interpret and construct pie charts and line graphs and use these to solve problems
- Calculate and interpret the mean as an average



pie chart

## English

### Reading Comprehension

- Asking questions to improve understanding and knowledge
- Noting and developing initial ideas, drawing on reading and research where necessary.
- Checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
- Increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions.
- Predicting what might happen from details stated and implied
- Reading books that are structured in different ways and reading for a range of purposes - both to read aloud and to understand the meaning of new words that they meet.



## Spelling and grammar

- Using commas to clarify meaning or avoid ambiguity in writing
- Using semi-colons, colons or dashes to mark boundaries between independent clauses
- Punctuation bullet points consistently
- To apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), to understand the meaning of new words that they meet.
- Using hyphens to avoid ambiguity
- Using expanded noun phrases to convey complicated information concisely
- Using modal verbs or adverbs to indicate degrees of possibility
- Selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- Spell some words with 'silent' letters (for example: knight, psalm, solemn)
- Using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun
- Continue to distinguish between homophones and other words which are often confused.
- Use further prefixes and suffixes and understand the guidance for adding them
- Recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms.
- Using further organisational and presentational devices to structure text and to guide the reader - for example, headings, bullet points, underlining



## Writing

- Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own.
- In narratives, describing settings, characters and atmosphere and integrating dialogue
- In writing narratives, considering how authors have developed characters and settings in what students have read, listened to or seen performed.
- Choosing the writing implement that is best suited for a task.
- Summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
- Using further organisational and presentational devices to structure text and to guide the reader - for example, headings, bullet points, underlining.

### Writing Genres

Flashback Stories – Writing exciting action and events, using the past or present tense correctly, using dialogue (speech) accurately.

Explanation Texts – Clearly explaining how something works or why it happens, using technical vocabulary.

## Science

### **Scientific Enquiry**

- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays.
- Using test results to make predictions to set up further comparative and fair tests
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- To give reasons for classifying plants and animals based on specific characteristics.



### **Animal/Plant Classification and Microorganisms**

- To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

### **Light**

- Recognise that light appears to travel in straight lines
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

## ICT

- To identify why e-safety is so important in today's life.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

