

### **Assessment Booklet – Numeracy Revision List (Year 7)**

- interpret diagrams and graphs (including pie charts)
- use efficient written methods to add and subtract numbers with up to 2 decimal places
- select appropriate mathematics and techniques to use
- use formulae for the area of rectangles and triangles.
- use appropriate notation, symbols and units of measurement, including compound measures.
- use ratio and proportion including map scales

### **Assessment Booklet 1 – Topic 1 (Year 7)**

- Understand that numbers have specific values that depend on their position.
- Explain and remember the names of the columns (varying from millions to thousandths).
- Understand how to order numbers including decimals to demonstrate a good understanding of place value.
- Round numbers to the nearest whole number, the nearest ten, hundred and thousand, to 1, 2 and 3 decimal places; to 1, 2 and 3 significant figures.
- Use a calculator to calculate the answer to complex problems; Show and use rounding to estimate the answers to these calculations (as a checking strategy).
- Look into formulae for finding the perimeter of squares and rectangles.
- Convert between units to ensure that all measurements are in the same unit before calculating.
- Take down the start time of task, end time of task and calculate the difference between these times.
- Understand how to calculate the range of values.
- Calculate the range of various types of data (include whole numbers and decimals).
- Use a problem solving approach to calculating the missing value in a data set when the range is given. Check this by estimation.

### **Assessment Booklet 1 – Topic 2 (Year 7)**

- Show a written method for multiplication – methods demonstrated should be grid method, Napier’s method, Traditional method, doubling and halving method. Students should use estimation to check their answers always – should be written down by the questions.
- Show a written method for division- methods demonstrated should develop the concept of division by drawing out and grouping, short division and long division. Students should use estimation to check their answers always – should be written down by the question.
- Students should understand the convention for order of operations – BIDMAS.
- Understand how to count squares to find the area of an irregular shape, e.g. hand; Use the same strategy to find the area of rectangles.
- Form a formula to find the area of a rectangle. Relate this to squares.
- Write the formal formula for the area of triangles –  $A = (b \times h) / 2$ . Include suitable units.
- Understand the method for calculating the mean.
- Use real data and ask students to calculate the mean, e.g. times from races, formula one drivers, sports day results, etc.
- Find the missing value from a set of numbers when the mean and other values are given.
- Know what the factors of numbers are.
- Write down the factors of square numbers – what do you notice?
- Find the prime numbers up to 100 by using multiples on a 100 grid. Write down the prime numbers and learn all up to 30.
- Find the highest common factor (HCF) of numbers by writing down the factors and comparing lists. Find THE HCF using a Venn diagram.