

### **Assessment Tasks Numeracy (Year 9)**

**Interpreting tables, Calculating percentages of amounts, calculating with money, using time to solve problems, calculating the area of circles, converting between currencies.**

#### **Assessment Booklet 1 – Topic 1 (Year 9)**

Recognise and apply key mental facts and strategies.

Use known facts to derive others, e.g. use  $7 \times 6$  to derive  $0.7 \times 6$ .

Multiply and divide whole numbers and decimals.

Use the order of operations including brackets and powers.

**Use known facts to derive others, e.g. use  $7 \times 6$  to derive  $42 \div 0.0006$ .**

**Multiply, divide and use brackets with powers.**

**Use the four operations in multistep calculations involving negative numbers, using mental and written methods.**

*Use a variety of mental and written methods for computation (Level 4).*

*They use their understanding of place value to multiply and divide whole numbers and decimals (Level 5)*

*They understand the effects of multiplying and dividing by numbers between 0 and 1 (Level 7)*

Use powers and understand the importance of powers of 10, **and its application in standard form, e.g.  $2^3 \times 2^4 = 2^7$**

Show awareness of the need for standard form and its representation on a calculator.

*They solve problems involving calculating with the extended number system, including powers, roots and standard form (Level 8).*

**Represent standard form on a calculator.**

*They solve numerical problems with numbers of any size, using a calculator efficiently and appropriately (Level 7).*

**Write a number as a product of prime factors in index form.**

#### **Assessment Booklet 1 - Topic 2 (Year 9)**

Use equivalence of fractions, decimals, percentages **and ratio** to select the most appropriate for a calculation.

Use, interpret **and calculate with** different representations of fractions, e.g. mixed numbers and improper fractions.

*They use the equivalences between fractions, decimals and percentages and calculate using ratios in appropriate situations (Level 6).*

Calculate a percentage increase or decrease.

Express one percentage as a quantity of another, **including those given in different units.**

*They calculate one number as a fraction or percentage of another (Level 6).*

Use ratio and proportion to calculate quantities, **including cases where the 'total' is not given.**

*Calculate proportional change (Level 7).*