# Numeracy and Maths: Second Level Indicators

# **Number, Money and Measure**

### **Estimation and rounding**

• I can use rounding techniques to estimate an answer deciding if it is reasonable.

### Number and number processes

- I can describe sets of numbers according to their features, eg through patterns, factors and multiples.
- I can use a calculator to can add, subtract, divide and multiply any pair of numbers including decimal.
- I can understand and use decimal notation and place value in decimal fractions to three decimal places.
- I have quick and accurate recall of all common multiplication and related division facts.
- I can use efficient mental strategies for addition, subtraction, multiplication and division calculations, including decimals and can apply to real life contexts.
- I can use efficient written strategies for addition, subtraction, multiplication and division calculations, including decimals and can apply to real life contexts.
- I can understand how the number line extends to numbers which have values less than zero.
- I can use inverse relationships of adding, subtracting, multiplying and dividing when simplifying calculations and solving problems.

#### Fractions, decimals and percentages

- I can explain the relationship between fractions, decimals and percentages.
- I can work with mixed numbers and improper fractions.
- I can compare and order fractions, decimals fractions and percentages.
- I can find simple equivalent fractions, decimal fractions and percentages using their simplest form in solving problems including real life scenarios, eg ¾ = 0.75 = 75%.
- I can calculate fractions, decimals or percentages of a quantity with and without a calculator.

#### Money

- I can manage money, compare costs from different retailers, and determine what I can afford to buy.
- I can understand the costs, benefits and risks of using bank cards to purchase goods or obtain cash and realise that budgeting is important.
- I can use the terms profit and loss in buying and selling activities and can make simple calculations for this.

#### Time

- I can use and interpret timetables and schedules.
- I can explain the relationship and convert between seconds, minutes and hour.
- I can carry out practical tasks and investigations involving timed events and can explain which unit of time would be most appropriate to use.
- I can give a good estimate of how long a journey should take, based on my knowledge of the link between time, speed and distance.

#### Measurement

- I can measure accurately using common tools, eg measuring wheels, stop watch, spring balances, cooking measuring scales, etc.
- I can make sensible estimates of length, weight, area and capacity and after measuring decide if answers are reasonable, eg cm/m. g/kg, ml/l.
- I can convert between units of weight, length, volume and area.
- I can apply knowledge of perimeter, area and volume to solve problems in real life contexts.

#### **Expressions and Equations**

• I can solve problems where an unknown value is represented by a symbol or letter

#### **Shape, Positon and Movement**

# Properties of 2D shapes and 3D objects

- I can use mathematical language to describe the properties of 2D shapes and 3D objects.
- I can show my understanding of the relationship between 3D objects and their nets.
- I can draw 2D shapes and make representations of 3D objects using an appropriate range of methods and resources.

# Angle, symmetry and transformation

- I can discuss, describe and classify angles using appropriate mathematical vocabulary.
- I can accurately measure and draw angles using appropriate equipment.
- I can understand the link between compass points and angles and can describe, follow and record directions, routes and journeys using appropriate vocabulary.
- I can apply my understanding scale to interpret simple models, maps and plans.

# **Information Handling**

#### Data analysis

- I can compare and contrast different displays of the same data, most appropriate, interpret and draw conclusions.
- I can work with others to accurately construct more complex graphs, tables and charts.
- I can use appropriate computer software to display data.

#### Ideas of chance and uncertainty

- I can investigate real life situations which involve making decisions based on the likelihood of events occurring and can use extended vocabulary or probability.
- I can assign a numerical value to the probability of a simple event.

