Year Six Mental Maths Objectives

- Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit
  e.g. What is the value of the 8 in 8,239,146?

- Round any whole number to a required degree of accuracy
  e.g. Round 3,819,278 to the nearest million

- Use negative numbers in context and calculate intervals across zero
  e.g. What is the difference between -37.4° C and 29.8°C?

- Perform mental calculations, including with mixed operations and large numbers
  e.g. What is 7000 x 0.9?

- Identify common factors, common multiples and prime numbers
  e.g. Is 37 prime or composite?

- Use their knowledge of the order of operations to carry out calculations involving the four operations
  e.g. What is 2 + 7 x 6?

- Solve mental calculations, including with mixed operations and large numbers
  e.g. What is 7000 x 0.9?

- Identify common factors, common multiples and prime numbers
  e.g. Is 37 prime or composite?

- Use their knowledge of the order of operations to carry out calculations involving the four operations
  e.g. What is 2 + 7 x 6?

- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
  e.g. How much change from £10 if you spend £1.45 and then £2.57?

- Double and halve three-digit numbers, including decimals
  e.g. What is double 79.6?

- Compare and order fractions, including fractions > 1
  e.g. Enter the correct sign between the fractions (< > or =)
  4/6   39/48

- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
  e.g. What is 1 ¾ + 2 ½ ?

- Multiply simple pairs of proper fractions
  e.g. What is ¾ x 2/5 ?

- Divide proper fractions by whole numbers
  e.g. What is 1/3 ÷ 2 ?

- 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 decimals places
  e.g. What is 47 ÷ 1000?

- Multiply one-digit numbers with up to two decimal places by whole numbers
  e.g. What is 0.09 x 12?

- Recall and use equivalences between simple fractions, decimals and percentages
  e.g. Express 78% as a fraction