

Key objective		Developing	Secure	Greater Depth
1	To read, write, order and compare numbers to at least 1 000 000 and find the value of each digit.	I can read and write numbers to 1,000,000 that are multiples of 100. I can choose the larger number out of two multiples of 100. Eg 30,000 and 300,000.	I can form a number with up to six digit cards and write it in words. I can place the correct sign (=, < and >) in statements, for example between 343,434 and 344,344.	I can write the number of megabytes on a memory stick in words and numerals. I can solve problems involving timelines. I can compare huge values such as the distance between planets.
2	To count forwards and backwards with positive and negative whole numbers, including through zero.	I can continue the sequence −1, 0, 1 ...	I can continue the sequence −3, −2, −1 ... in both directions. I can continue the sequence 1,5,9,13,....	I can solve problems such as 'Does the sequence −11, −6, −1 ... pass through 91?' I can find missing numbers in sequences
3	To round decimals with two decimal places to the nearest whole and to one decimal place.	I can round numbers like 3.14 to the nearest whole number (3) and to one decimal place with the support of a number line.	I can round numbers such as 4.76 to the nearest whole number (5) and to one decimal place (4.8).	I can identify a number that rounds to, for example, 6.6 to one decimal place. I can identify a range of numbers that would round to a given value.
4	To use column addition and subtraction with numbers of any size.	I can calculate $8234 + 3265$ and $8234 - 3265$ using column methods, with some prompting.	I can calculate $87,234 + 32,465$ and $87,234 - 32,465$ using column methods.	I can calculate $87,234 + 32,465$ and $87,234 - 32,465$ using formal columnar methods, describing why each step is used.
5	To complete, read and interpret information in tables, including timetables.	I can complete tables, deducing what is needed from the available information, with support. I can answer questions such as 'I get to the bus stop at 8:35 a.m. and catch the first bus that arrives. How long do I have to wait if it is on time?' using an appropriate bus timetable. I can solve problems using timetables such as 'I arrive at Bodmin station at 10 a.m. When is the next train to Plymouth?'	I can complete tables and timetables, deciding what is needed from the available information. I can answer questions such as 'I get to the bus stop at 8:35 a.m. and catch the first bus that arrives. What time do I arrive at Penzance?' when looking at an appropriate bus timetable. I can solve problems using timetables such as 'I need to be in Plymouth by 10 a.m. Which is the latest train from Bodmin I can catch and be there in time?'	I can complete tables and create timetables, deciding what is needed from the available information. I can answer questions such as 'I need to get to Penzance by 9:45 a.m. What is the latest bus that I can catch from St Ives?' when using an appropriate bus timetable. I can plan a trip using public transport to a destination of my choice.
6	To multiply a three- or four-digit number by a two-digit number using long multiplication.	I can calculate 3964×7 and 3964×32 using a formal written method such as the grid method.	I can calculate 3964×7 and 3964×32 using a formal written method such as the grid method or long multiplication.	I can calculate 3964×7 and 3964×32 using a formal written method such as long multiplication and relate the steps to the grid method.
7	To divide numbers up to four-digits by a single-digit number using short division.	I can calculate $714 \div 6$ using chunking and relating it to the formal written method of short division, with help I can solve division word problems knowing when to round up or down depending on the question with support.	I can calculate $7194 \div 6$ using the formal written method of short division. I can solve division word problems knowing how to deal with remainders or decimals based on the context of the question.	I can calculate $7194 \div 6$ using the formal written method of short division and extend it to dividing decimals involving four digits by one digit numbers. I can create and write word problems that require the remainder to be dealt with in different ways.
8	To compare and order fractions whose denominators are all in the same times table.	I can identify the smaller out of $\frac{3}{8}$ and $\frac{1}{4}$ with supporting diagrams.	I can identify the smaller out of $\frac{2}{3}$ and $\frac{13}{18}$.	I can identify the smaller out of $\frac{2}{3}$ and $\frac{13}{18}$ and write down a fraction that is between them.
9	To read and write decimals as fractions.	I can change a decimal into a fraction, for example 0.6 is the same as $\frac{6}{10}$.	I can change two digit decimals into fractions, for example 0.51 is $\frac{51}{100}$.	I can change three digit decimals into fractions, for example 0.126 is $\frac{126}{1000}$. I can change any decimal value into a mixed number.
10	To solve problems which require knowing important percentage and decimal equivalents.	I can solve problems such as 'Which is better: 25% commission or 0.15 of the sales?'	I can solve problems such as 'Which is more: 20% off or 0.75 of the full amount?'	I can decide which decimal and percentage equivalents are key ones and which can easily be worked out.
11	To add and subtract fractions with denominators that are in the same times table.	I can calculate $\frac{3}{4} + \frac{1}{2}$ with appropriate supporting materials.	I can calculate $\frac{3}{4} + \frac{5}{12}$ using a written method.	I can make up addition and subtraction problems involving fractions with the same denominator and multiples of the same denominator and solve them.
12	To identify multiples and factors of a number and common factors of two numbers.	I can list the factors of numbers below 10 and arrange them in pairs that multiply to give 10. I can list multiples of numbers in the multiplication tables.	I can identify multiples or factors of a number from a set of numbers below 50 and list the factors of 40 as 1, 40; 2, 20; 4, 10; 5, 8. I recognise that 5 is a common factor of 40 and 35.	I can list the common factors of two numbers. I know that numbers with only two factors, 1 and themselves, are called prime numbers. I can solve problems involving factors and multiples.
13	To read, write, order and compare numbers with up to three decimal places.	I can choose the larger out of 8.6 and 8.68 and write down a number between them with the support of a number line.	I can choose the larger out of 2.608 and 2.86 and write down a number between them.	I can choose the larger out of 2.608 and 2.86 and write down the number that is halfway between them.
14	To measure and draw angles.	I can draw an angle of 60° and draw a line measuring 7.4 cm.	I can draw an angle of 48° and draw a rectangle measuring 4.5 cm by 9.7 cm.	I can construct a triangle with angles of 48° , 60° and 72° and draw any rectilinear shape, with given dimensions, to the nearest millimetre.
15	To measure and calculate the perimeter of shapes in centimetres and metres.	I can measure the perimeter of an 'L shape' drawn on a piece of paper using a ruler, with prompting.	I can measure the perimeter of an 'L shape' drawn on a piece of paper. I can measure lengths to the nearest mm.	I can estimate the perimeter of an 'L shape', and check it by measuring.
16	To convert between adjacent metric units of measure for length, capacity and mass. Eg. cm to M, g to Kg	I can apply my knowledge of multiplying by 10, 100 and 1000 and the relationship between metric units to convert 3 kg to 3000 g and, with prompting, convert 3000 g to 3 kg by dividing by 1000.	I can apply my knowledge of multiplying and dividing by 10, 100 and 1000 and the relationship between metric units to convert 3.1 kg to 3100 g and 250 cm to 2.5 m.	I can convert 2.5 m to any of the less common measures such as Pico metres or Mega metres.
17	To know the difference between regular and irregular polygons.	I can decide if a polygon is regular by considering the lengths of the sides and the size of the angles, with prompts. I know the names of shapes with 3,4,5,6,8 sides.	I can sort a set of polygons into a Venn diagram according to whether they have equal sides and whether they have equal angles. I know that shapes in the centre are known as regular. I know the names of shapes with 3,4,5,6,7,8,9,10 sides.	I can sort a set of polygons into a Carroll diagram according to whether they have equal sides and whether they have equal angles. I realise that only the box where both are equal represents regular polygons. I can find symmetry in regular polygons and explain where regular polygons can be useful.