

# <u>Autumn term: Maths Year 6</u> Termly Number Non-negotiables



Within teaching, there will be regular reasoning opportunities for children, allowing them to develop their skills in explaining and justifying their thinking.

#### Place value

The great majority of children will be able to:

Identify the value of any digit in numbers up to 10,000,000

Compare and order numbers up to 10,000,000

Round any number to a required degree of accuracy

Have instant recall when multiplying and dividing numbers by 10, 100 and 100 giving answers up to 3 decimal places e.g. 894 x 1000 4528 ÷ 100

Use negative numbers in context and calculate intervals across zero

Solve number that involve all of the above

#### **Number: Addition and Subtraction**

The great majority of children will be able to:

Add and subtract mentally by partitioning multiples of 1000s, 100s and 10's

Partition to add and subtract decimals e.g. 8.4 + 3.8; 13.2 - 4.5

Use number bonds and related facts to add and subtract decimals e.g. 2.8 + 0.43 using knowledge of 280 + 43; 8.3 - 0.52 using knowledge of 830 - 52

Recall and use addition and subtraction facts for 1with decimals to 2 decimal places

Add and subtract numbers that contain different numbers of digits using the column method

Solve multi-step problems deciding which operations to use and why

## **Multiplication and Division**

The great majority of children will be able to:

Multiply numbers up to 4-digits by a 2-digit number using the formal written method of long multiplication

Divide numbers up to 4-digits by a 1-digit number using the formal written method of short division

Divide numbers up to 4-digits by a 2-digit number using the formal written method of long division

Identify common factors, common multiples and prime factors.

Use related facts to multiply and divide e.g. 8000x4; 3000x80; 56 000÷8; 96 000÷800

Use their knowledge of the order of operations to carry out calculations (BIDMAS)

Solve multi-step problems deciding which operations to use and why

### **Fractions**

The great majority of children will be able to:

Simplify fractions using common factors

**Compare and order fractions** 

Add and subtract fractions with different denominators and mixed numbers

Multiply simple pairs of proper fractions and write the answer in the simplest form e.g.  $\frac{1}{4} \times \frac{1}{2} = \frac{1}{6}$ 

Divide proper fractions by whole numbers e.g.  $\frac{1}{3} \div 2 = \frac{1}{6}$ 

Find fractions of an amount

Solve problems involving all of the above