

**Plan Of Learning For The Year (Unit/Topic/Project Context)**

**Half Term 1**

- Sequences
- Algebraic Notation (Function machines and Substitution)
- Equality and Equivalence (Simplifying Expressions and Solving Equations)

**Half Term 2**

- Place Value
- Fraction, Decimal and Percentage Equivalence

**Half Term 3**

- Solving Problems with Addition and Subtraction
- Solving Problems with Multiplication and Division
- Fractions and Percentages of Amounts

**Half Term 4**

- Operations with Directed Number (Negative Numbers)
- Addition and Subtraction of Fractions

**Half Term 5**

- Constructing, Measuring and Developing Geometric Notation (Use of a Protractor and a Pair of Compasses)
- Develop Geometric Reasoning (Angle Facts)

**Half Term 6**

- Number Sense (Rounding and Estimation)
- Sets and Probability
- Prime Numbers and Proof

**Feedback, Retrieval & Assessment**

- Self and peer assessment
- Weekly exit tickets (a check of understanding of key skills, marked by teacher)
- Termly teacher marked assessments
- Regular whiteboard work
- Live marking by teacher in lesson

**Super curriculum opportunities / extra-curricular activities**

- UKMT (UK Mathematics Trust) Junior Challenge– all students have the opportunity to partake in this nationwide problem solving competition)
- Research The Fibonacci Sequence and where there are links in real life, such as in nature and art.
- Dr Frost Maths for extra practice
- Read 'The Number Devil'

**Cultural Capital, SMSC, Careers and Futures**

- Links to famous mathematicians made throughout.
- Learning about financial maths, including money problems and using bank statements.
- Problem Solving – a transferrable skill for many careers.

**Common misconceptions**

- Exit tickets designed to address predicted misconceptions.
- Whiteboard questions used in lessons have misconceptions embedded throughout

**Connecting New Knowledge**

- Curriculum Maps to show sequencing of topics
- Knowledge organisers stuck in at the start of each new topic and referred to throughout the unit
- Retrieval starters promotes revisiting of skills taught in previous lessons
- Many topics are building on previous knowledge from KS2.

**Challenge for all**

- Problem Solving opportunities in all lessons
- UKMT Challenge (UK Mathematics Challenge) questions used on a regular basis in lesson
- Questioning used to challenge mathematical thinking

