

**WHAT ARE THE BIG AIMS OF YEAR 7?**

To further develop the skills and knowledge gained in KS2 focusing on number relationships, algebra using manipulatives and interpreting simple data. Build confidence and resilience in applying their knowledge in a variety of situations.

**WHAT WILL EXCELLENCE LOOK LIKE IN YEAR 7?**

Pupils being able to apply their Mathematical knowledge and skills to break down and solve problems, and be able to articulate their thinking.

**WHAT KNOWLEDGE DO THE PUPILS NEED TO ACQUIRE?**

Have an understanding of:

- Rules of algebraic manipulation
- Properties of shapes and angles
- Making sense of data
- Operations on fractions
- Negative numbers
- Number properties

**WHAT SKILLS DO THE PUPILS NEED TO DEVELOP?**

Pupils are able to:

- Write algebraic expressions, solve equations and substitute into formulae.
- Measure, Estimate and construct angles/shapes.
- Apply angle and shape properties to find missing angles.
- Determine the most appropriate average and to make conclusions and construct a suitable diagram.
- Apply operations on fractions to solve problems in context.
- To use numerical operations on negative numbers to solve problems.
- Use the properties of numbers in problem solving.

**WHAT MISCONCEPTIONS MAY THEY HAVE FROM PREVIOUS LEARNING?**

Misunderstanding of representing unknowns with letters.

Incorrect application of the rules of algebra.

Identifying base angles in isosceles triangles.

Incorrect use of protractor in measuring and constructing angles.

Incorrect, unequal scale on axes.

Adding and subtracting denominators.

Adding and subtracting without finding a common denominator.

Misunderstanding of square numbers, prime numbers, cube numbers, factors and multiples.

**WHAT ASSESSMENTS WILL BE USED ACROSS THE YEAR TO DEMONSTRATE HOW THE PUPILS HAVE ACQUIRED THE KNOWLEDGE AND DEVELOPED THE SKILLS?**

Termly cumulative assessments – to check progress over time, and compare across the year group.

Frequent mini assessments in class to check short term development of understanding of concepts taught.