

What is the intent of the Willenhall E Act curriculum?

We believe that students deserve a creative and ambitious mathematics curriculum, rich in skills and knowledge, which ignites curiosity and prepares them well for everyday life and future employment. Our mathematics curriculum will give students the opportunity to:

- *become fluent in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.*
- *reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.*
- *can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.*
- *can communicate, justify, argue and prove using mathematical vocabulary.*

We will enrich our curriculum by:

- *Establishing cross-curricular links especially through the learning of numerical skills and application in other areas/subjects.*
- *Using online external resources such as Hegarthy Maths to enhance and support independent learning and revision*
- *Experience of practical implementation of mathematics in everyday life for financial and numerical confidence and security*
- *Opportunities to promote STEM and further/higher education learning and careers*

Why is the curriculum ordered in the way it is?

To learn mathematics effectively, some things have to be learned before others, e.g. place value needs to be understood before working with addition and subtraction, addition needs to be learnt before looking at multiplication (as a model of repeated addition). For some other topics, the order isn't as crucial, e.g. Shapes and Statistics need to come after number, but don't depend on each other. We try to mix these so pupils have as wide a variety of mathematical experiences as possible in each term and year.

The curriculum provides suggestions and sample materials in a structured coherent curriculum to develop pupils into mathematical thinkers.