### **Maths**

### **Curriculum Aims**

The purpose of the Maths curriculum is to provide a secure understanding of mathematical concepts, from basic principles of mathematics to complex topics that combine several areas of study into a single question. The curriculum promotes retention of knowledge and a depth of learning rather than an accelerated curriculum, resulting in pupils who are confident in taking their studies further into sixth form, university and beyond.

In all year groups, there is an intentional focus on numeracy which will support pupils not only in their study of maths but will also enable them to access mathematical questions in other subjects.

### Here we explore these John Roan curriculum principles in the context of the maths curriculum:

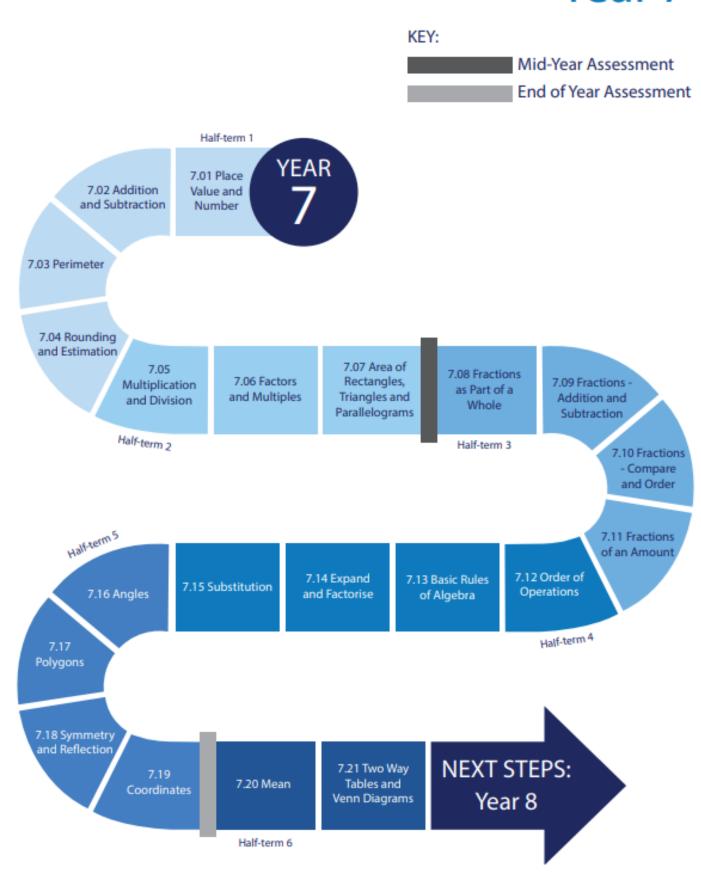
- Entitlement: All pupils in maths are exposed to extensive number, algebra, geometry, proportion, and statistics content and are not taught on separate pathways until Key Stage 4. This ensures that all pupils can access all areas of maths and have time to develop their skills before limiting their entitlement to Higher maths.
- **Coherence:** Our curriculum has been carefully sequenced to ensure that knowledge is revisited without having a spiral curriculum, and to ensure that classic misconceptions between topic areas are avoided.
- Mastery: Mathematical concepts are taught in-depth and continually revisited through careful interleaving of content into future teaching topics. The focus on retention of knowledge is at the core of the maths curriculum; the mastery approach supports this.
- Adaptability: Teachers are provided with a fully resourced curriculum that will meet the expectations of the maths curriculum in Key Stage 3 and Key Stage 4. Teachers are expected to adapt these resources and have autonomy in the way they are delivered in the classroom.
- **Representation:** Maths is universal, providing all pupils with an elegant and logical way of viewing the world. Where our resources include names and places, these have been selected to be inclusive. We believe that a secure understanding of maths is an essential starting point for all young people.
- Education with character: Mathematics is a common language in which all pupils can solve, analyse, and problem solve. Our curriculum supports pupils to build logical reasoning, critical thinking and is mentally rigorous.

## **Roadmap of the Maths Curriculum KS3**

The roadmap diagram on the following page sets out the route that students take through our Key Stage 3 curriculum. The roadmap shows the sequence of units covered in Year 7 to Year 9, broken down into a half-term structure to support planning and assessment points. All units are compulsory components of Key Stage 3 teaching and results in a core base of knowledge to begin Key Stage 4. The curriculum has been carefully designed to continuously interleave content, enabling pupils to revisit prior knowledge without having a spiral curriculum. The curriculum focuses on teaching in a sequence that provides building blocks for pupils to access future topics.

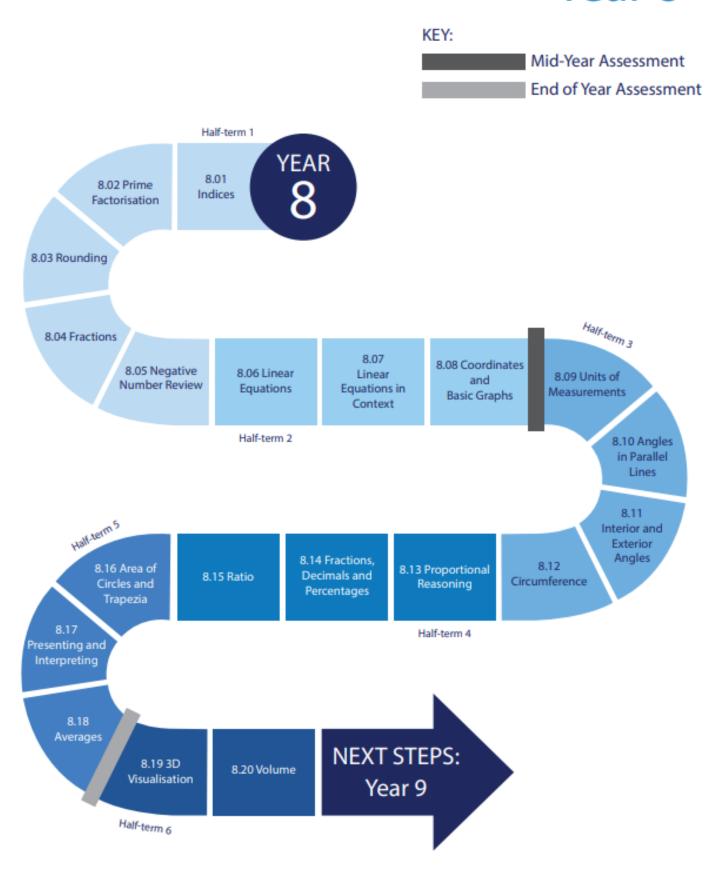


## Year 7





# Year 8





## Year 9

