

Mathematics is essential for everyday life and understanding our world. It enables the development of pupils' natural ability to think logically and solve puzzles and real life problems. Pupils learn to think creatively and make links between mathematical concepts through exploring patterns in the number system, shape, measures and statistics. They make and discuss propositions, explaining their reasoning and justifying their answers. They develop the skills, knowledge and efficient methods of calculation necessary to support their economic future and problem solving in life.

By following a spiral curriculum, our pupils are able to revisit a topic, theme or subject several times throughout their school career. The complexity of the topic or theme increases with each revisit but new learning has a relationship with old learning and is put in context. We believe the benefits of teaching in this way are that the information is reinforced and solidified each time the pupil revisits the subject matter as it allows a logical progression from simplistic ideas to complicated ideas. Furthermore, pupils are encouraged to apply the early knowledge to later objectives.

At Trinity High School, problem solving is at the heart of all mathematical learning and teaching. Every learning journey begins with a rich problem that is unpicked by the pupils. They identify what skills they will need to develop to be able to solve the problem and this is discussed alongside their teachers. These skills are then developed throughout a series of following lessons using a concrete-pictorial-abstract approach (CPA). Towards the end of the learning journey, the pupils have the opportunity to solve the problem and others that require a similar skill. By constructing the learning journey in this way, the pupils are given the opportunity to see how mathematical skills can be applied to real life problems therefore giving it a context.