

LJFS Mathematics – our intent

In the mathematics department at LJFS, we believe it is important for students to become independent and resilient learners. We aim to encourage an enjoyment of mathematics and problem solving and thus encourage students to unlock their full potential of achieving the highest grade they are capable of. We strive to help students understand Mathematics rather than memorising it and try to make it accessible for all through varied approaches. Our goal is for students to be equipped with the Mathematical skills they will need both in lessons and in real life.

In KS3, students will develop a variety of mathematical skills in number, algebra, geometry and statistics that will provide them with a solid foundation to tackle some of the more complex topics at GCSE. They will also learn how to communicate their findings and develop their reasoning skills. We aim to do this in a fun and interesting way that encourages both an interest and enjoyment of Mathematics.

In KS4, students will build on their KS3 skills and study the Edexcel GCSE in Mathematics. This is a linear course where all examinations are taken at the end of Year 11. To challenge students more, we encourage them to make links between topics and also give them access to further maths questions on any current topics they are working on. For those that then enjoy these challenges and show a flair and commitment to solving Mathematical problems, there is also the opportunity to take an extra GCSE in Further Maths.

Students are also entered in every year group for the Maths challenge, which is a national competition for gifted and talented students. Any pupils are welcome to enter this and we hope to nurture an enjoyment of problem solving through the challenge,

We aim to make Mathematics accessible for all via different teaching strategies and offer intervention via extra lessons or mathswatch tasks on topics they are struggling with. We also make a point of talking with other departments to find out what skills they use in other subjects to make sure we compliment each other with when and how we are teaching them.

In KS3 we follow the White Rose scheme of work which sequences lessons well for students to be able to build on their skills in preparation for KS4. They are then tested every half term on these skills so we can provide any intervention and revisit topics where necessary. The scheme of work in KS4 is then sequenced in such a way that as well as building up their topic knowledge, we have the opportunity to revisit topics and build on their skills each time. We encourage them to retain their knowledge by interleaving topics and starting lessons with short questions that recap topics previously studied. We again then test every half term so that they are maintaining their skills and practising using them on GCSE type questions. We extensively track how they are doing with different topics so that personal or class intervention can be offered where necessary. As every year group is different, we are also able to tailor the scheme of work slightly each year to the skills of the class making sure they can achieve their potential.