



Mathematics- Key Stage 3

Key contacts: Mrs L Davies, Miss A Sarson and Miss C Pyne

Overview of the course:

In Years 7,8 and 9 students will have eight Mathematics lessons a fortnight. Students are taught in streams for Mathematics.

Throughout Key Stage 3 students will be encouraged to develop their mathematical knowledge through a variety of topics and activities.

We aim to develop students' numerical, spatial and practical skills, to improve their ability to reason and approach problems in a logical and systematic manner. Students should build on Key Stage 2 and connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

Through the mathematics content, students should be taught to:

Develop fluency

Reason mathematically

Solve problems

Within this framework we aim to stimulate students' interest and their enjoyment in the subject.

What will you study?

Across the three years of Key Stage 3, students will study the main content strands of Mathematics

• Number

Students will learn how to use a range of computational methods and apply them to problems, using calculators where appropriate.

• Algebra

Students will learn about relationships and patterns between numbers, operations, develop simple algebraic techniques and apply these as appropriate.

• Ratio, proportion and rates of change

Students will learn about proportional relationships and ratio and be able to apply these to a range of problems in a variety of contexts.

• Geometry and measures

Students will learn about the properties of, and patterns within, various shapes, along with the application of various measures to shapes.

• Probability

They will learn about probability, both experimental and theoretical, including suitable diagrams and set notation.

• Statistics

Students will learn how to collect, represent and analyse and interpret data in one or two variables, using a variety of mediums.

Students at Key Stage 3 follow a Scheme of Work that has been designed to encourage them to spot more subtle links between topics, and develop their mathematical reasoning and independent learning through mastery.

Students will use a mixture of texts, online resources and supplementary materials, as appropriate. All students are expected to have their own scientific calculator which they will need to use throughout the course and which can be purchased from the Mathematics Shop in College.