

Year 10 - Physics

Year 10 is when students fully embark on their GCSE journey. They begin to build a more in depth understanding of the concepts learned earlier in each theme and develop aspirations of a career in STEM.

Throughout year 10 the students will use experimental techniques, critical thinking and considered questioning to explore a range of topics in biology, chemistry and physics.

Knowledge overview	Topic 1	Topic 2	Topic 3	Topic 4
Topic	Domestic electricity	Forces in depth	Waves in depth	Forces in motion
Theme	Electromagnetism 5	Forces and motion 4	Electromagnetism 6	Forces and motion 5
Overview	In this topic students will take an in depth look at how electricity can be used at home. Students will consider how the to calculate the power of various appliances along with evaluating the safety measure in place for domestic electricity.	In this topic students will look up to the stars to explain how they formed and how their motion can be explained. Students will analyse and critique the evidence put forward to explain the beginnings of the universe and how it will change in the future.	In this topic students will take a detailed look at waves and their properties. Students will use equations to understand the relationship between wavelength, frequency and wave speed. Students will also consider the risk associated with EM waves and evaluate their use in everyday society.	In this topic students will investigate how unbalanced forces can change the motion of an object. Students will apply their skills of using algebraic equations, using line graphs as well and calculating areas so explain how an objects motion can vary.