

Unit	Section	Content
FORCES AND MOTION	6.5.1 Forces and their interactions	<ul style="list-style-type: none"> -Describe the difference between scalar and vector quantities and give examples -give examples of contact and non-contact forces -Describe the relationship between mass, weight and gravitational field strength -Use an equation to calculate weight -Calculate the resultant force acting on an object -use free body diagrams to describe qualitatively examples where several forces lead to a resultant force on an object, including balanced forces when the resultant force is zero
	6.5.4.1: Describing motion along a line	<ul style="list-style-type: none"> -Describe the difference between distance and displacement -Use an equation to calculate speed -describe the difference between speed and velocity -Interpret distance-time graphs and velocity-time graphs -Use an equation to calculate acceleration -Describe how an object reaches terminal velocity
	6.5.4.2 Force, accelerations and Newton's Laws of motion	<ul style="list-style-type: none"> -Describe Newton's first law of motion -Describe Newton's second law of motion and use an equation to calculate the force required to make an object with a certain mass accelerate at a certain speed -Describe Newton's third law of motion
	6.5.4.3: Forces and braking	<ul style="list-style-type: none"> -Describe the stopping distance of a car -Define thinking distance -Describe factors that affect a driver's reaction time -evaluate measurements from methods to measure the different reaction times -Define braking distance -Describe factors that affect a car's braking distance -Explain the dangers caused by large decelerations
WAVES	6.6.2 Electro-magnetic Waves	<ul style="list-style-type: none"> -Describe the order of the electromagnetic spectrum -Describe the properties of the different parts of the EM spectrum -Describe the uses of the different parts of the EM spectrum -Describe the hazards associated with the different parts of the EM spectrum - Describe how changes in atoms and the nuclei of atoms can result in EM waves being generated
	Required Practical 21 investigate how the amount of infrared radiation absorbed or radiated by a surface depends on the nature of that surface.	<ul style="list-style-type: none"> -Identify dependent, independent and variables -Plan a method to ensure valid results are collected -Draw conclusions from data
MAGNETISM	6.7.1: Permanent and induced magnetism, magnetic forces and fields	<ul style="list-style-type: none"> -Describe the difference between a permanent and an induced magnet -Describe the attraction and repulsion between unlike and like poles for permanent magnets . -Define the 'magnetic field'. -Describe the properties of the magnetic field of a magnet -Describe how to plot the magnetic field of a magnet using a compass -Draw the magnetic field pattern of a bar magnet -Explain how a compass behaves when not in the magnetic field of a magnet
	6.7.2 The motor effect	<ul style="list-style-type: none"> -Describe how an electromagnet is made -Describe how to change the strength of the electromagnet

