

# **PHYSICS**

## **Learning Laws and Definitions**

There is a good chance that you have picked Physics because the links to mathematical skills is an area of strength for you, and you will not be required to write large essays.

Unfortunately, there is still work to do in terms of the language of Physics. We have a lot of technical language that you need to become familiar with and incorporate into your answers. This is not all bad as you will learn that often knowing the right words to use reduces the amount of writing you need to do to answer questions.

There are some definitions of terms and laws of Physics that the exam board will expect you to learn and be able to recall in exam conditions.

#### Look, Cover, Write, Check

A simple way to learn new terms and laws is Look, Cover, Write, Check.

- Look at the sentence you need to learn. Read it to yourself a few times.
- Cover up the sentence you have learnt so you cannot see it
- Write from memory the sentence you have read
- Check your answer against the definition. Look for incorrect or missing words.

### **Task**

Here is a list of terms and laws that we expect you to know by the end of Year 13. Some may be familiar form GCSE work but may be worded slightly differently. Some will be new to all. Provided over the page are some sheets for you to fill using Look, Cover, Write, Check. We would like you to complete these sheets two weeks apart. Hopefully, even after two goes, you might start to see recall is improved.

Term / Law	Definition
Archimedes Principle	The upthrust on an object in fluid is equal to the weight of displaced fluid.
Brittle	Property of a material that does not show plastic deformation.
Electric Field Strength	The force experienced per unit positive charge at that point in space.
Fundamental Particle	A particle with no internal structure that cannot be split into smaller particles.
Hooke's Law	The force applied is directly proportional to the extension of the spring unless the limit of proportionality is exceeded.
Mass Defect	The difference in mass of a nucleus and the mass of the constituent nucleons
Newton's First Law of Motion	A body will remain at rest or move with constant velocity unless acted upon by a resultant force.
Ohm's Law	The potential difference across a conductor is directly proportional to the current in the component as long as the temperature is constant.
Resultant Vector	A single vector that has the same effect as two or more vectors added together.
Threshold Voltage	The minimum potential difference at which a diode will conduct.

## **Recall Sheet**

Term / Law	Definition
Archimedes Principle	
Brittle	
Electric Field Strength	
Fundamental Particle	
Hooke's Law	
Mass Defect	
Newton's First Law of Motion	
Ohm's Law	
Resultant Vector	
Threshold Voltage	

## **Recall Sheet**

Term / Law	Definition
Archimedes Principle	
Brittle	
Electric Field Strength	
Fundamental Particle	
Hooke's Law	
Mass Defect	
Newton's First Law of Motion	
Ohm's Law	
Resultant Vector	
Threshold Voltage	