

# Physics



Scan for Specification

Edexcel A level Physics is a **two-year** context led approach to understanding physics. Many of the ideas and concepts encountered in this course will be familiar to those students who have studied Physics at GCSE. Studying physics at this level will develop a knowledge and understanding of what it means to work scientifically. Students will gain experience of a wide variety of topics and practical work ranging from an investigation into the absorption of gamma radiation to determining the acceleration of a freely falling object.

## BEFORE YOU START

- Key revision guide: Pearson REVISE Edexcel AS/A Level Physics Revision
- ISBN: 978-1447989981
- Equipment Required: Scientific calculator, pens, pencils, highlighters & a folder with dividers
- Useful Apps: Explore Mathematics with Desmos!

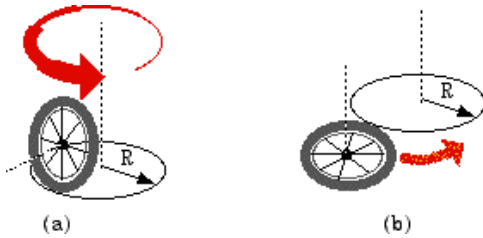
Using key vocabulary is vital at A level. Research the following key terms for the 1<sup>st</sup> topic and create a glossary.

- Gravitational Field Strength
- Uniform Acceleration
- Linear Momentum
- Vector Polygon
- Centre of Gravity
- Free body Diagram

Ideally create this glossary electronically so you can add or amend easily

### Can you solve this Physics Brain Buster?

In the pictures below we have (a) a wheel (mounted vertically) going round a circle of radius  $R$ , and (b) the same wheel, but this time mounted horizontally, going around the same circle.



If the wheel has radius  $R$  also, you will not be surprised if I tell you, it will make one complete revolution in case (a). The question is, does it make one revolution also in case (b)?

Do you know the answer to this question? ✓

Could you write down a mathematical solution to this problem? ✓

Prizes awarded to those who can!



Literacy Task

Problem Solving



Scan the QR code opposite to download and Physics Summer Work. Submit your work to the head of physics at the start of term.

Find out more about careers in Physics by visiting the following websites:

- <https://www.iop.org/careers-physics>
- <https://www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/physics>

Careers Task

Do this Task