

Physics Separate Science Curriculum Guide

Year 10

Exam Board: J249 OCR Gateway A (9-1) Physics

To find out more about this particular course, please follow the link below. https://www.ocr.org.uk/qualifications/gcse/gateway-science-suite-physics-a-j249-from-2016/

Autumn Taught Content

Unit P2:

- Forces and Springs
- Potential Energies
- Moments
- Simple machines
- Revision of topics covered during school closure.

Unit P3:

- Electrostatics
- Current
- Potential difference
- Circuits
- Resistance
- Power

Spring Taught Content

Unit P4:

- Magnets
- Current and fields
- Uses of magnetism
- Generators & Transformers
- Microphones

Summer Taught Content

Unit P5:

- Wave properties
- Waves speed
- Sound and Hearing

- Electromagnetic waves
- Lenses
- Colour

Assessment

Students will be tested formally throughout the year. This will be once per term, in the weeks either side of the half term breaks. Students will sit papers at either Higher or Foundation tier based on previous assessment. There will also be less formal assessments at other points during the year. Students will also be regularly tested on previous material from the GCSE course through low stakes quizzes.

Homework Expectations

Students should be set homework once every fortnight. This may include completing questions, research tasks or revision.

Reading List

Almost Like a Whale – Steve Jones

Cosmos - Carl Sagan

Storm in a Teacup: The Physics of Everyday Life – Helen Czerski Stephen Hawking: A Graphic Guide – JP McEvoy & Oscar Zarate

Flatland – Edwin A. Abbot

Extra and Super Curricular Opportunities

Currently none available in Year 10.