

# **Physics Separate Science Curriculum Guide**

### Year 11

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

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

# **Autumn Taught Content**

#### Unit P5:

- Waves & wave behaviour
- Electromagnetic waves
- Sound and hearing
- Colour
- Lenses

#### Unit P6:

- Radioactivity
- Nuclear equations
- Half-life
- Nuclear fission & fusion

# **Spring Taught Content**

#### Unit P8:

- Motion calculations
- Reaction times
- Collisions
- Energy resources
- Mains electricity
- The Big Bang
- Solar system
- Satellites
- Inside our Planet

Revision from previous units in preparation for summer exams.

### **Summer Taught Content**

Revision from previous units in preparation for summer exams.

#### Assessment

Students will be tested formally throughout the year. There will be mock exams in October & in January. 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 11.