

Curriculum Overview –Physics

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|---------|--------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------------|----------|
| Year 7 | 1. How Science Works Introduction to Science & Safety in the lab 2. Energy stores and changes | | 1. Forces contact and non-contact 2. Electrical circuits | | 1. Particle model of matter 2. Space and the solar system | |
| Year 8 | 1. Energy calculations 2. Waves | | 1. Forces and motion 2. Electrical circuits | | 1. Particle model of matter 2. Universe | |
| Year 9 | 1. Waves 2. Energy | | 1. Forces and pressure 2. Electricity and circuits | | 1. Atomic structure 2. Radiation | |
| Year 10 | 1. Energy 2. Internal energy transfer | | 1. Forces 2. Electricity | | 1. Magnetism 2. Energy transfer | |
| Year 11 | 1. EMS 2. Energy | | 1. Paper 1 Revision Energy Electricity Particle model of matter Atomic structure 2. Paper 2 Revision | | 1. Exams 2. Exams | |



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| | | Forces Waves Magnetism Space physics | |
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Homework Focus

All homework in science is set on Seneca, linked with the topics taught during the term

<https://senecalearning.com/en-GB/>

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| Year 7 | 1. How Science Works Introduction to Science & Safety in the lab 2. Energy stores and changes | | 1. Forces contact and non-contact 2. Electrical circuits | | 1. Particle model of matter 2. Space and the solar system | |
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| Year 10 | 1. Energy 2. Internal energy transfer | | 1. Forces 2. Electricity | | 1. Magnetism 2. Energy transfer | |
| Year 11 | 1. EMS 2. energy | | 1. Paper 1 Revision Energy Electricity Particle model of matter Atomic structure 2. Paper 2 Revision Forces Waves | | 1. Exams 2. Exams | |



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| | | Magnetism Space physics | |
| Year 12 | | | |
| Year 13 | | | |

Enrichment Opportunities

| | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 |
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| Suggested Reading | | | | | | | |
| Suggested Viewing | <p>BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zsg6m39</p> <p>Oak Academy https://classroom.thenational.academy/units/energy-0b08</p> <p>Oak Academy https://classroom.thenational.academy/units/forces-in-action-543b</p> | <p>BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zw982hv</p> <p>Oak Academy https://classroom.thenational.academy/units/energy-0b08</p> | <p>BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zw982hv</p> <p>Oak Academy https://classroom.thenational.academy/units/energy-0b08</p> | <p>BBC Bitesize Combined: https://www.bbc.co.uk/bitesize/examspecs/z8r997h</p> <p>Triple: https://www.bbc.co.uk/bitesize/examspecs/zsc9rdm</p> <p>Physics and maths tutor: https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/</p> | <p>BBC Bitesize Combined: https://www.bbc.co.uk/bitesize/examspecs/z8r997h</p> <p>Triple: https://www.bbc.co.uk/bitesize/examspecs/zsc9rdm</p> <p>Physics and maths tutor: https://www.physicsandmathstutor.com/physics-revision/gcse-aqa/</p> | <p>Youtube https://www.youtube.com/watch?v=DBIC0hAHKk4&list=PLXa3g48nDyc0qMzXFfwtoO5OHEuWToHfv</p> | <p>Youtube https://www.youtube.com/watch?v=w7iHI5QnQ2U&list=PLEgTEswuSSm2-j3lk7r81FqM0TOds45KB</p> |



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| Suggested Experiences | Science Museum Natural History Museum Greenwich observatory | Wonder Lab Science Museum Natural History Museum | Science Museum Natural History Museum | Science Museum Natural History Museum | Science Museum Natural History Museum Sixth forms open days | Science Museum University Open days | Science Museum University Open days |
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Links to the KS3 National Curriculum

| The National Curriculum | Welling Reference to the National Curriculum |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Year7: Energy Year 8: Energy; Motion and Forces Year 9: Energy; Forces Year 10: Energy; Forces and motion Year 11: Energy; Wave motion Year 12: Year 13: | Autumn Term |
| Year7: Electricity and electromagnetism; Forces Year 8: Electricity and electromagnetism; Waves Year 9: Forces and motion; Wave motion Year 10: Electricity | Spring Term |

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| <p>Year 11: Paper 1 Revision; Paper 2 Revision</p> <p>Year 12:</p> <p>Year 13:</p> | |
| <p>Year 7: Matter; Space physics</p> <p>Year 8: Matter; Space physics</p> <p>Year 9: Atomic structure; Structure of matter</p> <p>Year 10: Magnetism and electromagnetism</p> <p>Year 11: Examinations</p> <p>Year 12:</p> <p>Year 13:</p> | <p>Summer Term</p> |

Links to the Exam Specification

| The Exam Specification | Welling Reference to the Exam Specification |
|-----------------------------------------------|---------------------------------------------|
| KS4: GCSE AQA KS5: A Level OCR A | Autumn Term |
| KS4: GCSE AQA KS5: A Level OCR A | Spring Term |
| KS4: GCSE AQA KS5: A Level OCR A | Summer Term |