# LONG TERM PLANS
## Year Overview

### Science Faculty

#### YEAR 9

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<th>Autumn term</th>
<th>Spring term</th>
<th>Summer term</th>
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<td><strong>New Technology Biology</strong>&lt;br&gt;Genetics and inherited disorders&lt;br&gt;Selective breeding&lt;br&gt;Cloning&lt;br&gt;Genetic engineering&lt;br&gt;Biotechnology&lt;br&gt;Enzymes in industry&lt;br&gt;[End of topic test, Literacy and Numeracy task]**</td>
<td><strong>New Technology Chemistry</strong>&lt;br&gt;Nanoparticles and their uses&lt;br&gt;Pros and Cons of cars&lt;br&gt;New fuels and cleaning up exhausts&lt;br&gt;Hybrid electric cars&lt;br&gt;[End of topic test, Literacy and Numeracy task]**</td>
<td><strong>Turning Points Physics</strong>&lt;br&gt;Geocentric &amp; heliocentric model&lt;br&gt;The Big Bang&lt;br&gt;Satellites and their orbits&lt;br&gt;Space program (pros and cons)&lt;br&gt;Radioactivity&lt;br&gt;Electromagnetism&lt;br&gt;[End of topic test, Literacy and Numeracy task]**</td>
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<td><strong>New Technology Physics</strong>&lt;br&gt;Digital and analogue signals&lt;br&gt;Energy efficiency and electricity demand&lt;br&gt;Temperature&lt;br&gt;Optical fibres&lt;br&gt;Reaction times&lt;br&gt;[End of topic test, Literacy and Numeracy task]**</td>
<td><strong>Turning Points Chemistry</strong>&lt;br&gt;Looking for atoms&lt;br&gt;Evidence for atoms&lt;br&gt;Lessons from fossils&lt;br&gt;Discovering the periodic table&lt;br&gt;[End of topic test, Literacy and Numeracy task]**</td>
<td><strong>[End of topic test, Literacy and Numeracy task]</strong></td>
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#### Autumn term
The autumn term assessment will take place in the fortnight before the Christmas Holidays and will cover:

- New Technology Biology
  - Genetics and inherited disorders
  - Selective breeding
  - Cloning
  - Genetic engineering
  - Biotechnology
  - Enzymes in industry
  - [End of topic test, Literacy and Numeracy task]

- New Technology Chemistry
  - Nanoparticles and their uses
  - Pros and Cons of cars
  - New fuels and cleaning up exhausts
  - Hybrid electric cars
  - [End of topic test, Literacy and Numeracy task]

- New Technology Physics
  - Digital and analogue signals
  - Energy efficiency and electricity demand
  - Temperature
  - Optical fibres
  - Reaction times
  - [End of topic test, Literacy and Numeracy task]

#### Spring term
The spring term assessment will take place in the fortnight before the Easter Holidays and will cover:

- New Technology Biology
  - Vaccines and vaccinations
  - Antibiotics
  - Discover of DNA
  - The work of Charles Darwin
  - Preventing extinction
  - [End of topic test, Literacy and Numeracy task]

- New Technology Chemistry
  - Looking for atoms
  - Evidence for atoms
  - Lessons from fossils
  - Discovering the periodic table
  - [End of topic test, Literacy and Numeracy task]

- Turning Points Physics
  - Geocentric & heliocentric model
  - The Big Bang
  - Satellites and their orbits
  - Space program (pros and cons)
  - Radioactivity
  - Electromagnetism
  - [End of topic test, Literacy and Numeracy task]

#### Summer term
The End of Year Assessment will take place towards the end of May and will cover:
<table>
<thead>
<tr>
<th>Detection Biology</th>
<th>Detection Chemistry</th>
<th>Detection Physics</th>
<th>Start GCSE Studies</th>
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<tr>
<td>Microscopes</td>
<td>Separating solutions</td>
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<td>DNA fingerprinting</td>
<td>Chromatography</td>
<td>Solar System Position</td>
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<td>Blood typing</td>
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<td>AM and FM signals</td>
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<tr>
<td>Forensics</td>
<td>Recycling</td>
<td>Detecting particles</td>
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<td>[End of topic test,</td>
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