

**The Science department welcomes you to The Warren School**

**There are fourteen teachers in the department and two technicians.**

**The subject offers triple Science at GCSE Level and has an excellent intake at A Level.**

**You will be studying a variety of science based topics, during the curriculum, which are taken from the three main schools of Science – Biology, Chemistry, and Physics.**

**Students at KS3 follow the KS3 National Curriculum of study with elements of HSW (How Science Works) and practical investigative work embedded into the schemes of work from Year 7.**



The Science department follows the KS3 “Activate” scheme of work (SoW) when teaching Science in Year 7 + Year 8.

	Biology	Chemistry	Physics
Year 7	<ul style="list-style-type: none"> <li>• Cells</li> <li>• Structure and function of body systems</li> <li>• Reproduction</li> </ul>	<ul style="list-style-type: none"> <li>• Particles and their behaviour</li> <li>• Elements, atoms, and compounds</li> <li>• Reactions</li> <li>• Acids and alkalis</li> </ul>	<ul style="list-style-type: none"> <li>• Forces</li> <li>• Sound</li> <li>• Light</li> <li>• Space</li> </ul>
Year 8	<ul style="list-style-type: none"> <li>• Health &amp; Lifestyle</li> <li>• Ecosystem processes</li> <li>• Adaptation and inheritance</li> </ul>	<ul style="list-style-type: none"> <li>• The periodic Table</li> <li>• Separation Techniques</li> <li>• Metals and acids</li> <li>• The Earth</li> </ul>	<ul style="list-style-type: none"> <li>• Electricity and magnetism</li> <li>• Energy</li> <li>• Motion and Pressure</li> </ul>

In year 9, we embed a Warren-specific SoW tailored for bridging the transition from KS3 to Ks4.



**We follow the AQA New GCSE Combined Trilogy + AQA New separate which consists of Biology, Chemistry and Physics at GCSE level.**

Guide to the new GCSE course for Year 10 + 11:

- Human Biology – Co-ordination and control, Healthy eating, Drug abuse, Controlling infectious diseases.
- Biology – Cells, How plants produce food, Energy flows, Enzymes, Homeostasis, Inheritance
- Evolution and Environment – Adaption for survival, Variation, Evolution, How people affect the planet
- Energy and Energy Resources – Heat transfer, Using energy, Electrical energy, Generating electricity
- Physics – Motion, Speeding up and slowing down, Work energy and momentum, Static electricity, Current electricity, Mains electricity, Nuclear physics
- Radiation and the Universe – Electromagnetic waves, Radioactivity, The origins of the Universe
- Products from Rocks – Rocks and buildings, Rocks and metals, Crude oil.
- Chemistry – Structures and bonding, Structures and properties, Rates of reaction, Energy and reactions, Electrolysis, Acids alkalis and salts.
- Oils, Earth and Atmosphere – Products from oils, Plant oils, The changing world.
- Biology – Exchange of materials, Transporting substances around the body, Microbiology
- Chemistry – Development of the periodic table, More about acids and bases, Water, Further Chemistry
- Physics – Turning forces, Light and sound, Electromagnetism, Stars and space.

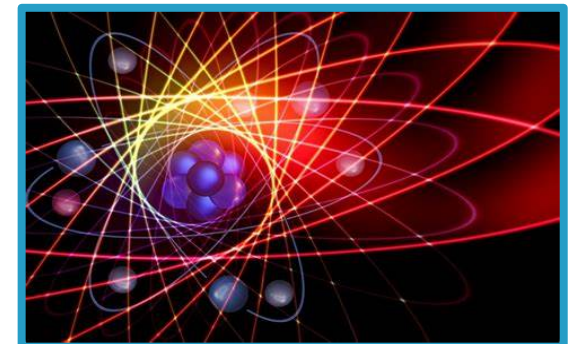


Science is extremely popular at KS5, with a varied offer across many subjects and levels. This includes:

- A-Level Biology
- A-Level Chemistry
- A-Level Physics
- BTEC Science

Upon completing these courses, our pupils have progressed to university to study a whole variety of degrees including:

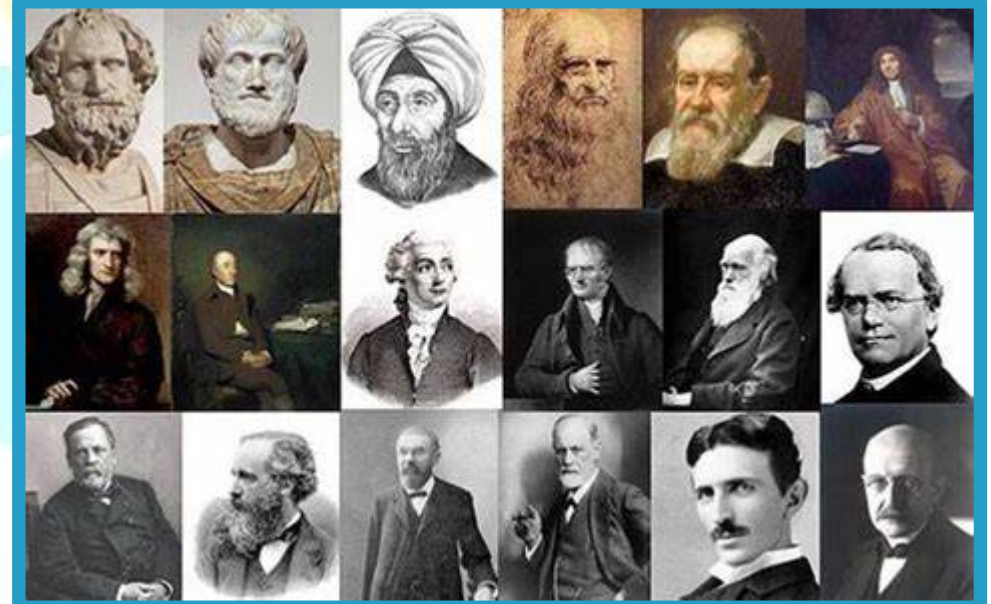
- Medicine and dentistry
- Nursing and Midwifery
- Engineering,
- Biological Sciences
- Analytical Science
- Social Science-based courses



**Browse around these websites, then try the activities and quizzes**

- <https://www.bbc.co.uk/bitesize/topics/znyycdm/articles/zr69dxs>
- <https://wordwall.net/resource/3016364/y6-hazard-symbols-find-match>
- <https://wordwall.net/resource/221638/science/digestive-system>
- <http://www.bbc.co.uk/learningzone/clips/10592.flv>
- <https://www.youtube.com/watch?v=bMVYEV7XuA>
- <https://www.stem.org.uk/stem-clubs-> Extra-curricular activities

**Have a go at naming these famous scientists...**



**Do you know what they are famous for?**