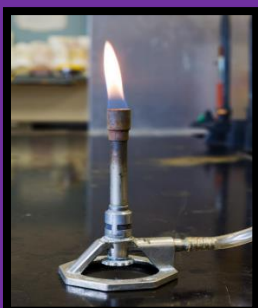




# SCIENCE CURRICULUM



## at Bronte Girls' Academy



### OUR VISION

The ambitious science curriculum allows pupils to develop the skills and knowledge they bring with them from primary school. There are 9 “big ideas” and each idea is visited at least once every year. Each topic has a focus on remembering scientific knowledge, applying scientific knowledge, and developing practical scientific enquiry skills. Lessons have a strong practical focus and along with our regular STEM days aim to equip pupils with the skills, knowledge, and confidence to make a difference to the challenges faced by the human race.

### TOPICS COVERED

|        | Term 1  | Term 2  | Term 3   |
|--------|---|---|--|
| Year 7 | <ul style="list-style-type: none"><li>• Introduction to science</li><li>• Cell Structures</li><li>• Organ Systems / Movement</li><li>• The states of matter</li><li>• Mixtures and how to separate them</li></ul> | <ul style="list-style-type: none"><li>• Density</li><li>• Forces</li><li>• Pressure</li><li>• Acids and Alkalis</li><li>• Earth and its Atmosphere</li></ul>      | <ul style="list-style-type: none"><li>• Reproduction</li><li>• Ecosystems</li><li>• Energy</li><li>• Energy</li><li>• Understanding Waves</li><li>• Electricity</li></ul>      |
| Year 8 | <ul style="list-style-type: none"><li>• Density</li><li>• Changing States</li><li>• Waves</li><li>• Light &amp; sound</li><li>• Organ Systems</li></ul>   | <ul style="list-style-type: none"><li>• Biological Reactions</li><li>• Atoms, Elements and Compounds</li><li>• Chemical Reactions</li><li>• Electricity</li></ul> | <ul style="list-style-type: none"><li>• Static Electricity</li><li>• Earth and Space</li><li>• Magnets &amp; Electromagnets</li><li>• The Producers</li><li>• Metals</li></ul> |

|        |  |   |   |
|--------|--|---|---|
| Year 9 | <ul style="list-style-type: none"> <li>• Metals and their uses</li> <li>• States of Matter and Mixtures</li> <li>• Atomic Structure</li> <li>• The Periodic Table</li> </ul> | <ul style="list-style-type: none"> <li>• Evolution</li> <li>• Eukaryotic and Prokaryotic cells</li> <li>• Heat Energy</li> <li>• Energy and Efficiency</li> <li>• Describing Motion</li> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>• Digestion and Enzymes</li> <li>• The Atmosphere and Climate</li> <li>• Ceramics, Polymers and Composites</li> <li>• Static Electricity</li> <li>• Waves and the Electromagnetic Spectrum</li> <li>• Forces and Motion</li> </ul> |
|--------|--|---|---|

## ASSESSMENT

- Each Unit is assessed with a short Assessment and Feed Forwards Task.
- Longer synoptic assessments will take place every term.

## OUTSIDE OF THE CLASSROOM

In order to enrich our curriculum, and to show how science is used in the real world, pupils will participate in regular STEM events, along with the opportunity to take part in a STEM club, where themes around science, technology, engineering and maths are explored in a less formal manner. There will be visits to relevant organisations these may include Bradford Media Museum, Universities, Yorkshire Water, Manchester Science Museum, WISE events, and Science careers workshops.

## USEFUL RESOURCES

