

Our Science Curriculum

Our science curriculum intends to provide students with a strong foundation in scientific concepts and skills, and to develop their ability to think critically, analytically, and creatively about scientific problems and phenomena. This will empower them to make informed decisions and be curious and engaged citizens in the world.

To achieve this, we will:

- Provide a comprehensive and balanced study of scientific concepts, including life sciences, physical sciences and earth and space sciences.
- Encourage students to think critically about scientific problems and to develop their own scientific reasoning and problem-solving skills.
- Develop students' curiosity and interest in the natural world through hands-on activities and investigations.
- Promote a sense of curiosity about science and to develop a love of scientific exploration and discovery.
- Encourage students to understand the connections between different scientific concepts and to appreciate the usefulness of science in everyday life.
- Provide opportunities for students to explore scientific ideas and concepts through inquiry-based learning and real-life problem-solving.
- Foster a positive attitude towards science, and to inspire students to become lifelong learners.

Big Ideas in Science

Our curriculum progression explores these big ideas in science, encouraging critical thinking about the ideas and concepts, and the building of strong foundations in which to continue to deepen understanding in science.

- 1. All material in the Universe is made of very small particles.
- 2. Objects can affect other objects at a distance.
- 3. Changing the movement of an object requires a net force to be acting on it.
- 4. The total amount of energy in the Universe is always the same but energy can be transformed when things change or are made to happen.
- 5. The composition of the Earth and its atmosphere and the processes occurring within them shape the Earth's surface and its climate.
- 6. The solar system is a very small part of one of millions of galaxies in the Universe.
- 7. Organisms are organised on a cellular basis.
- 8. Organisms require a supply of energy and materials for which they are often dependent on or in competition with other organisms.
- 9. Genetic information is passed down from one generation of organisms to another.
- 10. The diversity of organisms, living and extinct, is the result of evolution.