

British Values and SMSC in Science

British Values

With the school population representing the different ethnic groups in Eastbourne, finding commonality and building a collective sense of community is vital for a cohesive co-existence.

British Values recognises the multi-cultural, multi faith and ever-changing nature of the United Kingdom. All schools, including Gildredge House, have a vital role in ensuring that our young people are not subjected to intimidation or radicalisation by those wishing to unduly, or illegally, influence them.

Democracy	<p>Students will appreciate the universal language of Science that transcends borders and spoken languages. The scientific method of peer reviewing as an evaluative tool using the informed input of others will be embodied in peer-assessment and feedback activities within lessons.</p> <p>Students will be exposed to fundamental ideas that are applicable wherever you are (e.g. Newton's Laws) as well as ideas (e.g. embryonic stem cell research) that are more sensitive to a particular country's democratic laws.</p> <p>Students will develop teamwork and collaborative working skills and will be able to evaluate different peoples' viewpoints.</p>
The rule of law	<p>Students are taught to respect Laboratory Rules to ensure the safety of themselves and others. An understanding of following instructions leading to successful practical work will help develop an appreciation for established rules and consideration for others.</p> <p>Laws relating to particular aspects of Science (e.g. cloning, GM food, drug research, nuclear energy) will be discussed at the relevant point in the curriculum, developing an understanding of why these laws are in place and an appreciation of the contexts in which laws may differ.</p> <p>Students will also learn about the nature of Science (e.g. Forensics) in supporting the criminal and judicial systems.</p> <p>Students will be able to follow sequenced instructions to carry out practical work, risk assessments and work safely with regard to established rules.</p>
Individual liberty	<p>Students will experience independent practical work, understanding that individual choices taken during experimentation have consequences.</p> <p>Many topics studied provide students with a foundation of information that society uses to inform individual choices when</p>

	<p>engaging with real life scenarios underpinned by science (eg vaccinations, mobile phone use).</p> <p>Discussion will be encouraged to analyse different viewpoints of complex debates which may lead into a person's individual choices, and that these may vary from person to person even when exposed to the same factual information.</p> <p>Students will be able to work independently to investigate scientific questions.</p>
Mutual respect	<p>Debate, discussion and listening to reasoned arguments and hypotheses are fundamental to our students' scientific learning journey. Students will experience the ability to put forward differing interpretations of evidence and the conclusions that may be drawn, accepting that others' interpretations may well be different to their own. Students will discover that there are often equally valid conclusions from similar data sets.</p> <p>Evaluation and judgement of outcomes will also require an effort to mutually respect fellow students.</p> <p>Students will work collaboratively within lessons, taking shared responsibility within teams whilst respecting the work of others to achieve a common goal.</p>
Tolerance of those of different faiths and beliefs	<p>Whilst Science is a subject of fact and evidence, it shares in a desire to answer fundamental questions, such as how life began. Throughout their studies, students will learn scientific theories that illustrate humanity's shared heritage and interdependence, regardless of faith and belief, as well as our place in the rich biodiversity of the planet.</p> <p>The scientific contributions of different cultures will also be celebrated (eg Copernicus, Galileo, Mendeleev)</p> <p>Students will be aware of how scientific data is often open to differing interpretations and that theories may be challenged and adapted as new evidence is discovered.</p>

Spiritual, Moral, Social and Cultural (SMSC) Education

At Gildredge House School, SMSC is central to our school vision as we believe that we should look after ourselves and each other, show empathy, integrity and support to all people and our environment along the way. We encourage tolerance, resilience, and reflection, which in turn allows everyone to make progress every lesson.

The personal development of students, spiritually, morally, socially and culturally is intertwined with our values of Ambition, Support, Perseverance, Integrity, Reflection and Empathy.

Department of Education advice published in 2014 states that through the provision of SMSC, schools should:

- Enable students to develop their self-knowledge, self-esteem and self-confidence.

- Enable students to distinguish right from wrong and to respect the civil and criminal law of England.
- Encourage students to accept responsibility for their behaviour, show initiative, and to understand how they can contribute positively to the lives of those living and working in the locality of the school and to society more widely.
- Enable students to acquire a broad general knowledge of and respect for public institutions and services in England.
- Further tolerance and harmony between different cultural traditions enable students to acquire an appreciation of and respect for their own and other cultures.
- Encourage respect for other people.
- Encourage respect for democracy and support for participation in the democratic processes, including respect for the basis on which the law is made and applied in England.

<p style="text-align: center;">Spiritual Development</p>	<p>Students' spiritual development involves the growth of their sense of self, their unique potential, their understanding of their strengths and weaknesses, and their will to achieve. As their curiosity about themselves and their place in the world increases, they try to answer for themselves some of life's fundamental questions. They develop the knowledge, skills, understanding, qualities and attitudes they need to foster their own inner lives and non-material wellbeing</p>	<p>In Science, students will develop their own curiosity and wonder at life and have the opportunity to explore questions about where life may have originated, how it is defined and how it has evolved. A natural curiosity will be engendered, and critically analysed, about life on our planet and our place in the Universe. Through experimentation and research, students will actively search for meaning in natural and physical phenomena.</p>
<p style="text-align: center;">Moral Development</p>	<p>Students' moral development involves students acquiring an understanding of the difference between right and wrong and of moral conflict, a concern for others and the will to do what is right. They are able and willing to reflect on the consequences of their actions and learn how to forgive themselves and others. They develop the knowledge, skills and understanding, qualities and attitudes they need in order to make responsible moral decisions and act on them.</p>	<p>Alongside the factual basis of scientific discoveries, students will appreciate the moral dilemmas that may sometimes accompany them. They will explore the benefits and drawbacks of putting scientific advancements into practice and the limits of moral boundaries versus what is technically possible. They will also appreciate the elements of risk and danger involved in important scientific breakthroughs. Students will be encouraged to approach studying science with an open mind, free from prejudice, across a variety of themes (eg antibiotics, space exploration, contraceptives, cloning, farming)</p>

<p style="text-align: center;">Social Development</p>	<p>Students' social development involves pupils acquiring an understanding of the responsibilities and rights of being members of families and communities (local, national and global), and an ability to relate to others and to work with others for the common good. They display a sense of belonging and an increasing willingness to participate. They develop the knowledge, skills, understanding, qualities and attitudes they need to make an active contribution to the democratic process in each of their communities.</p>	<p>In Science, students will regularly engage in group work when completing practical experiments. They will learn the soft skills required to work well with their peers, as well as the responsibility to carry out procedures effectively and safely.</p> <p>Students will consider the societal impacts, both positive and negative, of scientific advancements (eg mobile phones, vaccinations).</p> <p>Students will consider how to share differing viewpoints and learn to appreciate other points of view.</p>
<p style="text-align: center;">Cultural Development</p>	<p>Students' cultural development involves pupils acquiring an understanding of cultural traditions and an ability to appreciate and respond to a variety of aesthetic experiences. They acquire a respect for their own culture and that of others, an interest in others' ways of doing things and curiosity about differences. They develop the knowledge, skills, understanding, qualities and attitudes they need to understand, appreciate and contribute to culture.</p>	<p>Major scientific discoveries and ideas will be seen to be part of our cultural fabric. Students will appreciate the contributions of differing cultures and nationalities into the greater common body of scientific knowledge from which our current learning draws from.</p> <p>The importance of science and technology in supporting our cultural identity, activities and interconnectedness, such as electricity generation and wireless communication will also be explored. The spirit of collaboration between scientists of different nations and cultures for the advancement of knowledge will embody many of the groupwork activities undertaken in lesson.</p>