Spiritual, moral, social and cultural development

Our curriculum ensures that pupils are equipped with the knowledge and cultural capital they need to succeed in life and provides multiple opportunities for this throughout our study units, home learning activities and extra-curricular offers is indicated below:

Spiritual Development in Science

Sometimes science and spiritual ideas do cause conflict but in a modern society it is important to understand why these conflicts arise so we can respect the views of others and move forward. It is seen more often that science is able to stand alongside the spiritual beliefs of many. This is looked at often from a neutral stand point within science lessons.

Experiencing awe and wonder

- The impact of waves in Physics
- Evolution in Biology
- The Big Bang Theory in Physics
- The development of the periodic table in Chemistry
- Wegner and sea floor spreading

Exploring the values and beliefs of others

- The use of stem cells in reproductive research and the cure for inherited diseases
- Embryo selection
- Use of genetic testing for some religious groups
- The use of genetically modified crops and bacteria
- The impact of pollution on our planet
- The ethics of cloning animals

Understanding Human feelings and emotions

- The implications of abortion
- Genetic diseases
- Human behaviour and learning

Using imagination and creativity in learning

- Students develop speaking skills
- Presentation skills Creative learning tasks
- Cartoon strip

Using descriptive writing to elicit emotion and feelings

- PAFT activities
- Acting and role play
- Silent debates

Moral Development in Science

Our understanding of Science has allowed us to develop technology we couldn't have imagined 50 years ago. Now however, we must start deciding if we should we do all the scientific activities we are able to or morally should we decide not to. This can be as simple as should we test medicines for humans that could save lives on animals causing them cruelty? It could be as complex as should we allow somatic or germ line cell therapy. Moral development is a vital part of any scientist's development. Students will need to develop a good understanding of it to firstly pass exams which always comprise of ethical questions but more importantly to become a good rounded scientist.

Spiritual, moral, social and cultural development

Investigating moral values and ethical issues	Recognising right from wrong and applying it:	Understanding the consequences of their actions
• Human impact upon our planet and environment • The ethics of cloning and genetic testing • The debate on the use of alternative energy forms (impact of wind farms or the use of bio fuels) • The safety of nuclear fuels and reactors.	• The use of cloning • Use of fossil fuels • Deforestation • Animal rights in drug testing	• Staff role model the behaviour expected from their students • The legal aspects of drug abuse • The growing impact of rising obesity levels in Western Society • The use of chemical based fertilisers – eutrophication.

Social Development in Science

Scientific development comes from all across the world, from people of all backgrounds and cultures. Some of science's most important discoveries have come from other parts of the world and it's important for students to understand this as many believe that progress comes largely from the UK or America. It is also important to understand how the different cultures around the world can have different impacts on the planet and what impact more economically developed countries have on poorer areas. This will also be vital into the future as we need to monitor the impact of quickly developing cultures around the world on our environment.

Developing personal qualities and social skills	Participating cooperatively and resolving conflict	Understanding how communities and societies function
• The use of digital and analogue signal • Radiation as a means of communication • Limestone quarrying and salt mining • Listening to the viewpoints of different scientific groups and politicians • Developing the ability to take a full and active part in lessons	• The nuclear debate pro and cons • Fossil fuels v biofuels v nuclear fuel • Should we carry out PGD?	• Salt mining • Different cultural and societal views on genetic testing and abortion • How science is portrayed in the media (Science in the news)

Cultural Development in Science

Scientific development comes from all across the world, from people of all backgrounds and cultures. Some of science's most important discoveries have come from other parts of the world and it's important for students to understand this as many believe that progress comes largely from the UK or America. It is also important to understand how the different cultures around the world can have different impacts on the planet and what impact more economically developed countries have on poorer areas. This will also be vital into the future as we need to monitor the impact of quickly developing cultures around the world on our environment.

Exploring, understanding and respecting diversity

- Understanding genetic variation
- Plant and animal biodiversity, sustainability and its importance
- Different types of ecosystem

Participating in and responding to cultural activities

- Celebrating Space
- Star formation
- Big Bang Theory
- Changing ideas about the universe
- Science week

Understanding and appreciating personal influences

Celebrating the role scientists have played in our society. For example, the influence of:

- Newton
- Darwin
- Mendel
- Mendeleev
- Galileo
- Ptolemy
- Copernicus
- Curie
- Kepler
- Boyle
- Herschel
- Franklin

"How far you go in life depends on your being tender with the young, compassionate with the aged, sympathetic with the striving and tolerant of the weak and strong. Because someday in your life you will have been all of these."

– George Washington Carver

American agricultural scientist whose work resulted in the creation of more than 300 products from peanuts.