Spiritual, Moral, Social and Cultural Development: Science

Year Group	Spiritual Development	Moral Development	Social Development	Cultural Development	British Values
All	Encouraging pupils to reflect on the wonder of the natural world. Reflection on spiritual interpretation. Showing respect for differing opinions, on creation for example. Development of skills to enable pupils to hypothesise and ask questions.	Consideration of the moral dilemmas that can result in scientific developments. Understanding of scientific research and the ethical issues that surrounds it. An understanding of moral conflict Concern for others and the will to do what is right.	Awareness of the ways that science and technology can affect society and the environment. Co-operation in practical activity. Explore the impact of how science affects people's livelihoods.	Raising awareness that scientific developments are the product of many different cultures. Developing an interest in exploring and developing an ability to participate in science.	Individual liberty of views, tolerance, mutual respect and listening to others' views is taught through the topics where different views / ethics are involved. Practical activities in science require students to engage in team work and show mutual respect for each other.
3	Through the study of light and shadow think about the wonder of the world in which we live. Observing natural processes through helping plants grow well and testing rocks and soils	Finding out about important processes (forces) in order to better understand the world around them. Begin to understand the issues surrounding these processes and the impact on mankind.	An appreciation of a healthy lifestyle through the topic of movement and growth. Developing an understanding of how plants grow well and the importance of this.	The use of light and shadow by the Egyptians and the social context of this. How different environments can affect processes Skeletons and muscles recognises diversities and differences between individuals.	The study of Isaac Newton- a British scientist. Rocks and plants: Accepting responsibility for their own behaviour through the human impact on the environment. Evaluate importance of recycling and the use of alternative fuels. Movement and Nutrition: understanding and accepting that others may be different to themselves.
4	Respect for the environment through animal habitat studies and the threat of extinction. Phenomenon of scientific ideas through electricity and sound. (Creating light/shattering glass with sound video)	Habitats – develops an awareness of the impact modern man has on the environment e.g. extinction of animals. Animals In-tuition workshop learning about animals in the environment. Effect of pollution/human action on animals and their habitats. People's bodies grow at different times/in different ways. Respect difference.	Electricity workshop, learning and discovering electricity. Links with Electricity North West and the wider community. Electrical safety and the dangers in the environment. Dangers/hazards of sound (visit from sound engineer/acoustician) Global studies through the water cycle and thinking about problems.	Animals from all over the world and their habitats and threat of extinction. Exploring different sounds through a variety of musical instruments from different parts of the world. Homework assignment to research and make a musical instrument.	The study of teeth and digestion- to care for the sick, the poor, the weak and the old and treat them as valued members of our society. Practical activities in science require students to engage in team work and show mutual respect for each other.
5	To understand the world around us and our position within it. Exploring space, sound.	Concern for other creatures through study of life cycles. .	SRE and healthy lifestyle – drug awareness. Alcohol awareness theatre workshops. Visit from police.	Uses of certain materials for certain uses in society based on properties.	Democracy is taught through student debates on issues such as whether smoking and drinking

	Visits to MOSI Learning from reflections of own experiences in experiments. Observing the transformation of butterflies in the classroom.	Puberty-changes Emotional changes: Awareness that people change/develop at different rates.	Role play: Peer pressure. Awareness of (and respect for) changes as people develop and age.	Natural habitats-amphibians, mammals, plants. All living creatures with a place.	should be made illegal and animal habitats and classification. Experience awe and wonder at the different theories on the origins of the Universe- Earth, Sun and Moon topic. The study of Isaac Newton- a British scientist.
6	Creation of own ideas for investigations. How light helps us to see things and how this can be explored. Appreciation of awe and wonder of life cycles. Respect for other creation beliefs and the tension between Science and Christianity. Recognise the impact of diet, exercise, drugs and lifestyle on the way our bodies function.	CSI day develops an understanding of methods police use to catch criminals and make our lives safer. Habitats: Develop an awareness of the impact modern man has on the environment e.g. extinction of animals/species.	Working together in groups towards a common goal, promoting tolerance and respect. Discovering how micro-organisms affect our lives and health. First Aid workshop. Recognise the impact of diet, exercise, drugs and lifestyle on the way our bodies function.	How electricity helps our world to develop. Need for universal circuit symbols. Animals from all over the world and their habitats. Threat of extinction.	Individual liberty of views, tolerance, mutual respect and listening to others' views is taught through the topics where different views / ethics are involved. For example, in topics such as evolution versus creation, genetic modification, selective breeding, stem cell research and animal testing. To acquire an appreciation of their own and other cultures by debating different theories of evolution and creationism.