



End of Year Expectations SCIENCE Year 5

Spiritual Development

- 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.
- Involves the search for meaning and purpose in natural and physical phenomena
- Reflect on the wonder on the natural world.
- Sense of enjoyment and fascination in learning about themselves, others and the world around them.
- Willingness to reflect on their experiences.

Moral Development

- Pupils to become increasingly curious
- To develop open mindedness to the suggestions of others and to make judgments on evidence not prejudice
- Scientific developments may give rise to moral dilemmas
- Consider the environment recycling- plastic
- Sustainability- plantin

Social Development

- Scientists are collaborators. Sharing ideas, data, and results for further testing and development by others.
- We encourage pupils to work together on scientific investigations and to share results to improve reliability.
- Group and practical work
- Taking responsibility for their own and other people's safety.
- Pupils consider the social impact, both positive and negative, of science and technology.
- Pupils are willing to participate within the community at Maths and Science quiz.

Cultural Development

- To understand that scientific development comes from all across the world, from people of all backgrounds and cultures.
- To know that important discoveries have come from other parts of the world as well as America and Uk.
- Understand that different cultures around the world can have different impacts on the planet and what impact more economically developed countries have on poorer areas. E.g clothes industry – Ghana
- To explore how scientific discoveries have shaped the, beliefs, cultures and politics of the modern world
- Celebration of current events- linked to scientists

MATHS

Reading scales on thermometers
Collecting data- parachutes average times-
Measuring surface area- graphs and tables to record time
Comparing weight(N) and mass (g)
Number- top trump tournament. Fact file on each planets
Investigating the circumferences, radius and surface area of various planets.
Classification- Carroll diagrams, line graphs

LITERACY

- Speaking and listening, questioning, discussion, predicting, observing,
- Reading scientific texts- scientists. Explore science 'News' websites
- Biographies- research and create biographies of the scientists or inventors for year group, create character profiles or interview the scientists through hot seating.
- Explanation Text- explain how or why something works within a science investigation.
- Researching facts using resources.
- Read and write facts and observations
- Write investigations and conclusions- consider features of instructions (imperative verbs)
- Learning and using scientific language and key words linked to themes
- Using descriptive language about animals and plants
- Observe and describe- scientific reactions
- Linking science through stories – Kensuke's Kingdom is full of opportunities to explore properties of materials, you can even use the context of survival scenarios linked to the book.

CAREERS

Climate Change Analyst, Meteorologist, Forensic, Astronaut,
Aerospace Engineer, Teacher, Botanist, Gardener

SEN

- To overcome potential barriers to learning in Science some pupils may need:
- inclusive learning environment- Scientific language on displays,
 - Knowledge organisers
 - help in managing the written communication or reading a text
 - a multisensory approach- practical work
 - access to adapted resources to overcome difficulties with mobility or

COLLABORATION

Community events- Laceby In Bloom
Trips/visits- School In The Woods
Hook Days- Nature Area
Learning Shares/Class assemblies
Collaboration and Peer work- outdoor learning
planting seasonal.
Science week- Investigations, scientists