Science Big Ideas (Key Concepts)

There are a number of key concepts which underpin the study of Science. Pupils need to understand these concepts in order to deepen and broaden their knowledge and understanding.

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

| KC1 | Ask Questions | Children will ask simple questions and recognise they can be answered in different ways. |
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| | • | Children will use simple secondary sources to find answers. |
| KC2 | Find Things Out | Observe closely and perform tests to answer questions. |
| | o o | Gather and record data to help in answering simple questions. |
| кс3 | Perform simple tests | Perform simple tests to find answers to questions. |
| | P | Children will communicate their findings in a range of ways, they will talk about what they have found out and how |
| | | they found it out. |
| KC4 | Notice patterns | Children should begin to notice patterns and relationships. |
| KC5 | Observe changes | Children will observe changes over time (for example the way a bulb grows into a plant) |
| кс6 | Group and classify | Children should use simple features to compare objects, materials and living things and, with help, decide how to sort and group them. |
| KC7 | Use Scientific vocabulary | Children will use simple scientific language. |