## **Science**



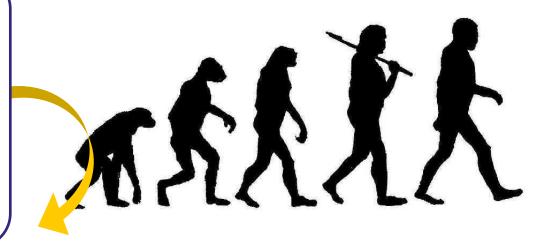
All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.

## **Evolution and Inheritance**

**Autumn 1** 

## **Key Vocabulary:**

- Variation
- Inherited
- Evolution
- Offspring
- Adaptation
- Genes
- Sexual reproduction
- Characteristics
- Suited
- Adapted
- Environment
- Fossils
- Species



## **New Knowledge:**

- All living things have offspring of the same kind, as features in the offspring are inherited from the parents.
- Due to sexual reproduction, the offspring are not identical to their parents and vary from each other.
- Plants and animals have characteristics that make them suited (adapted) to their environment.
- If the environment changes rapidly, some variations of a species may not suit the new environment and will die.
- If the environment changes slowly, animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young e.g. peppered moth, Darwin's finches.
- Over time, these inherited characteristics become more dominant within the population. Over a very long period of time, these characteristics may be so different to how they were originally that a new species is created. This is evolution.
- Fossils give us evidence of what lived on the Earth millions of year ago and provide evidence to support the theory of evolution.
- More recently, scientists such as Darwin and Wallace observed how living things adapt to different environments to become distinct varieties with their own characteristics.