



Year 6



Evolution and Inheritance



Statutory Requirements:

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

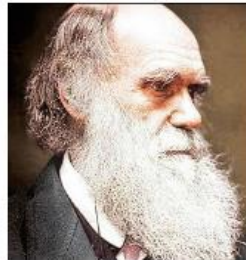
Working Scientifically:

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations

Key Vocabulary:

- Evolution
- Natural selection
- Adaptation
- Variation
- Survival
- Reproduction
- Offspring
- Inheritance
- Parents
- Siblings
- Environment
- Species
- Fossils
- Organism

Key Scientists:



Classic
Charles Darwin (1809 – 1882)
 English naturalist, geologist and biologist, known for his work 'On the Origin of Species'.



Contemporary
Ojore Oka (???? –)
 Researching how genes influence the shapes of proteins in cells in the body; in some cases, leading to disease.

Key Knowledge:

- Fossils are things which were once living and have been preserved in rock.
- Living things produce offspring of the same kind – for example humans produce other humans.
- Offspring have some similarities to their parents but are not identical.
- Animals and plants are adapted to suit their environment for purposes such as obtaining food.
- Adaptations to their environments have led to animals evolving (changing) over time.



Year 6

Electricity



Statutory Requirements:

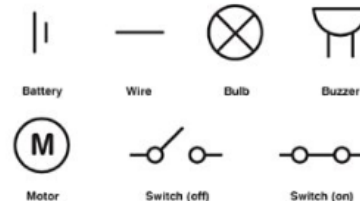
- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram

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Key Knowledge:

- A circuit always needs a power source, such as a battery.
- Higher voltage cells result in brighter lamps and louder buzzers.
- When a switch is open (off), electricity cannot travel around the circuit. When a switch is closed (on), electricity can travel around the circuit.
- Components in a circuit can be represented in a circuit diagram using circuit symbols.



Key Vocabulary:

- Electricity
- Voltage
- Series Circuit
- Component
- Bulb (Lamp)
- Buzzer
- Switch
- Motor
- Battery
- Cell
- Brightness
- Volume
- Circuit Diagram
- Circuit Symbol

Key Scientists:



Classic
Thomas Edison (1847-1931)
 Inventor of the fuse, light bulb and film camera.



Contemporary
Johnny Srouji (???? -)
 Vice President of Hardware Technologies at Apple.

