

Year 6 – Evolution and Inheritance

An Example of Natural Selection: Peppered Moths

1. Light-coloured moths were common.
2. During the Industrial Revolution (1760-1840) coal burning covered moth's habitats in black soot.
3. This gave the dark coloured moths a greater chance of survival because they had better camouflage than light moths.
4. Many light-coloured moths died as they were easily spotted by their prey.
5. Dark coloured moths became more common.
6. As pollution has reduced over time the light-coloured moths have become more common again.

Mary Anning

| | |
|------------------|---|
| Dates | 1799 - 1847 |
| Fossil hunting | Mary's family had little money so she largely spent her time searching the beaches with her brother for items to sell. |
| Famous Discovery | Aged 12 she discovered the skull of a mysterious creature on a beach in Dorset which was a Ichthyosaur (which means 'fish lizard'). |
| More Discoveries | Went on to discover a long-necked marine reptile called a Plesiosaur and a flying reptile called a Dimorphodon. |
| Famous for | Mary is remembered as one of the greatest fossil hunters to have ever lived. |



The Process of Evolution

1. More organisms are born than can survive.
2. These individuals all have slight variations between them.
3. Some of these variations are helpful and improve an organism's chance of survival.
4. Those that survive pass their characteristics onto their offspring.
5. Over time these helpful variations are passed on to the next generation.
6. This process takes thousands of years and can't be seen from one generation to the next.

Charles Darwin

| | |
|--------------------|---|
| Dates | 1809-1882 |
| Famous Book | On the Origin of Species |
| Famous Achievement | Developed the theory of evolution which attempts to explain why there are different species of animals. |
| Quote | 'A man who dares to waste one hour of time has not discovered the true value of life' |
| Famous Voyage | HMS Beagle (1831-1836) Visited the Galapagos Islands. |

Darwin's Journey on HMS Beagle



Vocabulary Dozen

| | |
|-------------------|--|
| evolution | Gradual change in on organism's characteristics over many generations. |
| inheritance | Passing on characteristics to offspring. |
| organism | An animal or plant. |
| characteristics | A feature or quality belonging to a person or animal. |
| offspring | The young of an animal or the seedling of a plant. |
| adaptation | Changing to become better suited to their environment. |
| generation | The time between when an organism comes into being and when it reproduces. |
| environment | The natural surroundings in which you live or exist, in relation to either their physical characteristics or weather conditions. |
| palaeontologist | The study of fossils as a guide to the history of life on earth. |
| characteristics | A feature or quality belonging to a person or animal. |
| variation | A change or slight difference. |
| Natural Selection | The process where organisms that are better adapted to their environment survive and produce more offspring. |

