



Processes

- Charles Darwin came up with a theory about how animals evolved.
- Animals and plants are adapted to suit their environment and that adaptation may lead to evolution.
- Fossils provide information about living things that inhabited the Earth millions of years ago.
- Living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.



Materials



Properties

- Irreversible changes involve a chemical reaction.
- Dissolving and melting are not the same thing.
- Dissolving is a chemical change and is irreversible.
- Melting is a change of state, which is reversible.
- Chemical reactions are useful in cooking and help to improve the taste of food.
- The starting materials in a chemical reaction are called the reactants. These react with each other to form a completely new substance known as the product.
- Products have very different properties to the reactants. Cakes are firmer and taste better than the individual reactants. The colour is different too.



Conduct

- By repeating observations and measurements, the data collected becomes more reliable.



Record

- Recording results in a table or chart can help make trends visible, such as a bar chart or line graph.



Significant Scientists

Alan MacMasters (20/03/1865 – 25/12/1927) was a Scottish scientist. He is credited with creating the first electric bread toaster, a process that took 10 years (1883—1893).

Steve Jobs (24/02/1955—05/10/2011) was an American product designer, investor, and media proprietor. He was the chairman, chief executive officer (CEO), and co-founder of Apple Inc. The company was founded in 1976. Jobs left the company in 1985, launching Pixar Animation Studios, but returned to Apple in 1996.



Careers

There are several careers that could be considered based on learning about animal adaptations and reversible and irreversible changes, such as:

- Biologist, an expert in or student of the branch of science concerning living organisms.
- Zoologist, an expert in or student of the behaviour, physiology, classification, and distribution of animals.
- Marine biologist, a person who studies the biology of marine life (organisms in the sea).
- Veterinarian, a person who treat injured animals.
- Conservationist, a person who advocates or acts for the protection and preservation of the environment and wildlife.
- Chef, a professional cook, in a restaurant.
- Chemist, a person carries out chemical research or experiments.
- Chemical Engineer, a person who studies the operation and design of chemical plants as well as methods of improving production .



Enquire

- By finding out about the properties of materials, we can choose the most appropriate material for a specific purpose.
- By asking questions about how animals and plants have evolved and adapted, we will gain a better understanding of how to protect species from human related extinction.



Scientific vocabulary

Key vocabulary and meanings

***Material** - A substance that is used to make something is a material.

***Evolution** - The process by which different kinds of living organism are believed to have developed from earlier forms during the history of the earth.

Adaptation - The act of changing something or changing your behaviour to make it suitable for a new purpose or situation.

Inheritance - to receive (a quality or characteristic) through a parent's genes.

Reactant - the materials that you start off with before a chemical change happens

Products - the materials that are formed in the chemical change.