



Vocabulary

food chains a series of living things in which each serves as food for the next

producer a living thing that makes its own food

consumer a living thing that cannot make its own food

invertebrates an animal without a backbone

classify to put into groups according to observable characteristics

vertebrates an animal with a backbone

plant a living organism that uses sunlight to make its own food

habitat the non living environment surrounding a living thing. It provides space, shelter, food and water

evolution the theory that all the kinds of living things that exist today developed from earlier types.

animal a living organism is able to move independently but cannot produce its own food

characteristics a distinguishing feature of a living organism

interdependence how living and non-living things depend on one another.

Biology

Science Y6: Living things and their habitats and micro-organisms

Key diagrams and knowledge

Scientists believe that there could be as many as 10 million different species on Earth. It would be very hard to study the lives and behaviours of all these living things without grouping them together. Scientists sort and group living things according to their similarities and differences. This is called **classification**. Scientists who classify living things are called taxonomists. Animals can be sorted, or classified, in a number of different ways. One example of how living things can be classified is through answering a series of questions using a **branched key diagram**.

The 7 characteristics of living things: movement, reproduction, sensitivity, growth, respiration, excretion and nutrition. These can be remembered using the acronym, 'MRS GREN.'

Classifying micro-organisms: Micro-organisms is an organism that is microscopic, for example, a bacterium, fungus and virus. All micro-organisms can be classified using the Linnaean taxonomic system.

Animals and plants adaptation: all living organisms have physical or behavioural characteristics that have developed over time to allow them to better survive in their environment.

Food chains: A food chain shows a feeding relationship between organisms in a particular habitat. As you progress along the food chain, each successive organism eats the previous one.

Food webs: Most animals are part of more than one food chain and eat more than one kind of food in order to meet their food and energy requirements. These interdependent food chains form a **food web**. To the right, is an example of one.

Scientists

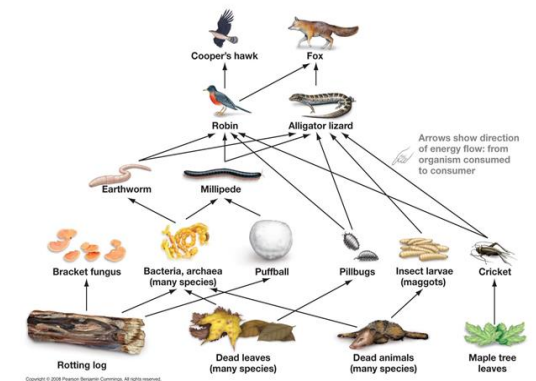
Carl Linnaeus developed the first system to classify animals effectively.

Joseph Lister was a surgeon who introduced carbolic acid to sterilize surgical instruments.

Edward Jenner was the first doctor to introduce and study the smallpox vaccine.

Alexander Flemming discovered the enzyme lysozyme and penicillin.

Louis Pasteur created the first vaccine of rabies.



Links to prior learning:

Living things and their habitats in Year 1, 2, 3, 4 and 5

Links to other subjects:

Evolution and inheritance, guided reading, English extended writing