

Characteristics and classification

Name the seven characteristics of living organisms.

Characteristics and classification

Define respiration.

Characteristics and classification

Define growth.

Characteristics and classification

Define excretion.

Characteristics and classification

How can organisms be classified into groups?

Characteristics and classification

Define species.

Characteristics and classification

What is the binomial system?

Characteristics and classification

How is a binomial name written?

The chemical reactions in cells that break down nutrient molecules and release energy for metabolism.

Movement, respiration, sensitivity, growth, reproduction, excretion, nutrition (MRS GREN).

The removal of the waste products of metabolism and substances in excess of requirements.

A permanent increase in size and dry mass.

A group of organisms that can reproduce to produce fertile offspring.

By the features that they share.

Genus with a capital letter, species with a lower-case letter. Italics in print; underline each word by hand.

An internationally agreed system for naming species. The scientific name has two parts: the genus, then the species.

Characteristics and classification

What is a dichotomous key?

Characteristics and classification

What makes a good statement in a dichotomous key?

Characteristics and classification **Supplement**

What do classification systems aim to reflect?

Characteristics and classification **Supplement**

How can DNA be used to classify organisms?

Characteristics and classification **Supplement**

How do DNA sequences compare in closely related species?

Features of organisms

State three features of animals.

Features of organisms

State three features of plants.

Features of organisms

Name the five vertebrate groups.

One clear, observable feature that is paired with its contrast, such as 'has fur' and 'does not have fur'.

A series of paired statements that leads you to the identity of an organism, using identifiable features.

The sequences of bases in DNA are compared between organisms.

Evolutionary relationships.

Multicellular, no cell walls, no chloroplasts, feed on other organisms, have a nervous system. Store glycogen.

More similar, because they share a more recent common ancestor.

Mammals, birds, reptiles, amphibians and fish.

Multicellular, cellulose cell walls, chloroplasts, photosynthesise, store starch, no nervous system.

Features of organisms

Features of mammals.

Features of organisms

Features of amphibians.

Features of organisms

Name the four arthropod groups and one example each.

Features of organisms

How do insects differ from arachnids?

Features of organisms **Supplement**

Name the five kingdoms.

Features of organisms **Supplement**

Features of a fungus.

Features of organisms **Supplement**

Features of a prokaryote.

Features of organisms **Supplement**

Features of a protocist.

Moist, smooth skin; jelly-covered eggs laid in water.

Fur or hair, mammary glands that produce milk, external ears (pinnae).

Insects: three body parts, three pairs of legs, antennae, usually wings. Arachnids: two body parts, four pairs of legs, no antennae.

Myriapods (centipede), insects (housefly), arachnids (spider), crustaceans (crab).

Chitin cell walls, no chloroplasts, hyphae (most), feed by absorption, reproduce by spores, store glycogen.

Animal, plant, fungus, prokaryote, protist.

Mostly single-celled and microscopic, with a nucleus. Some have chloroplasts, as in *Chlorella*. Others feed like animals, as in *Amoeba*.

Single-celled, no nucleus, and a cell wall that is not made of cellulose. An example is a bacterium.

Features of organisms **Supplement**

Name the two groups of flowering plants and how they differ.

Features of organisms **Supplement**

Features of ferns.

Features of organisms **Supplement**

A many-celled organism has chitin cell walls and no chloroplasts. Which kingdom?

Features of organisms **Supplement**

State the features of a virus.

Leaves called fronds, no flowers, reproduce by spores.

Monocots have one cotyledon and parallel leaf veins. Dicots have two cotyledons and branching leaf veins.

A protein coat and genetic material.

Fungus.