



Umbrella question



How do plants and animals differ?

Key Vocabulary

microorganism	A microorganism is an organism that can only be seen using a microscope.
species	A species is a group of organisms with shared characteristics that can reproduce to produce fertile offspring.
characteristics	A characteristic is a particular feature or quality that is specific to an individual, species or group.
classification	Classification is the process of grouping living things according to their similarities.
classification key	A classification key is a set of questions used to identify and group living things. They are usually based on an organism's physical characteristics .
organism	' Organism ' is another way to refer to a living thing.

Hinge questions

How do we classify living things?

How do invertebrates differ?

Are all plants the same?

Are micro-organisms alive?

Are micro-organisms helpful or harmful?

Flowering and Non-Flowering Plants

Plants can be sorted based on whether they are flowering or non-flowering. Flowering plants use flowers to produce seeds at some point in their life cycle, whereas non-flowering plants reproduce using cones, spores and fragmentation.

Flowering plants include deciduous trees, many types of herbs and crop plants.


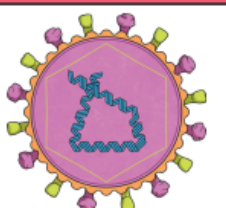








Non-flowering plants include conifers, mosses, ferns and liverworts.







Microorganisms

Microorganisms are microscopic **organisms** that can be found almost everywhere on Earth – including inside our bodies.

Bacterium	Virus	Fungus
 cholera bacteria	 influenza virus	 honey fungus
single-celled microorganism	very simple structure	can be very small or very large
found almost everywhere on Earth	scientists often disagree about whether they are alive or not	often have a fruiting body and a network of threads
can be spherical, rod shaped or curved/spiral	require a host to reproduce	reproduce through releasing spores

Vertebrate Groups				
Mammal	Bird	Reptile	Amphibian	Fish
				
warm-blooded fur or hair give birth to live young produce milk	warm-blooded feathers lay eggs beak and wings	cold-blooded scales or scutes usually lay eggs	cold-blooded moist or slimy skin often undergo metamorphosis	cold-blooded live in water scales and fins gills

Some Invertebrate Groups			
Arthropod	Annelid	Mollusc	Echinoderm
			
segmented legs include insects, crustaceans and arachnids	segmented bodies no legs include earthworms and leeches	segmented bodies no legs include slugs and octopuses	live in salt water tube feet include sea stars and sea urchins