#### **Lesson 5: Classifying Critters**

• I can use scientific language to explain how microbes and fungi can be helpful as well as harmful.



# Quiz time! True or False?

	True	False
Fungi are not alive.		
Microbes are always bad.		
Fungi are plants.		
Living things are be split into two categories: animals and plants.		
Germs cause diseases.		



## Microbes and fungi

#### <u>Glossary</u>

**Fungi** – a group of living things that appear similar to plants but cannot make their own food using sunlight in the way plants do. Fungi (pl.) consume plant, animal, and other living matter. Fungi help decompose dead plants and animals. Examples: mushrooms, yeasts, and moulds.

Microbe - single-celled bacteria organisms.

Bacteria – species involved in fermentation and infectious diseases.





**Fungi** is neither a plant nor an animal. Fungi are not like plants: they cannot make their own food (they don't photosynthesise). Fungi do not make pollen like plants do; they reproduce by making spores. They are not green and can be further divided into smaller groups.

Many fungi play the role of **decomposers**, breaking down plant and animal material. Mushrooms and toadstools are the reproductive parts – they appear above ground to spread spores. A field of mushrooms forming a fairy ring are usually all part of the same single organism. The **mould** that grows on our food is also a type of fungus. Other single-celled fungi, such as **yeast**, ferment sugar and produce ethanol (alcohol) and carbon dioxide gas. They are very important in making bread, as the gas causes bubbles in the dough and makes the bread rise.

### Year 6 Science





**Microbes** can be very helpful at getting rid of waste. We use them in things like Yakult to help our digestive system process our food and produce waste, but they can also help compost heaps get rid of waste.

**Bacteria** are a large and diverse group of single-celled organisms without a nucleus. They are microscopic and found almost everywhere on Earth. They can live in extreme environments, from boiling hot springs, deep in the oceans and even growing on nuclear waste. They are found in the intestines of many animals, including humans, and aid digestion. Other bacteria can cause infectious diseases such as cholera, tuberculosis and bubonic plague. Bacterial infections can be treated by antibiotics.

Bacteria reproduce by splitting themselves into two. Some bacteria, such as *E. coli* which causes food poisoning, double in number every 20 minutes. If one gets inside you, how many would there be after 3 hours? 12 hours?



Plan your writing

	Helpful	Harmful
Fungi		
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Bacteria		





**Writing** Explain how fungi and bacteria can be both helpful and harmful.

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