

LO: To classify microorganisms

1. I can identify types of microorganisms
2. I can describe helpful and harmful organisms
3. I can make a microbe (STEAM)

Did you know?

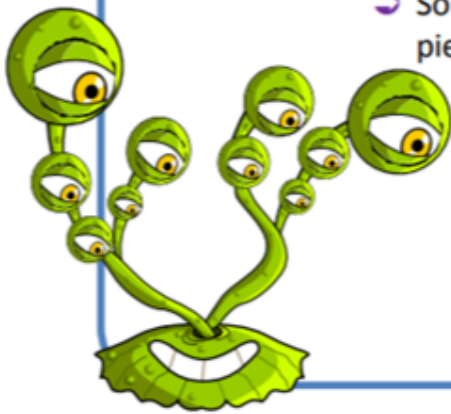
➤ There are more microbes on the planet than any other type of living thing

➤ Microbes are the oldest form of life on Earth. They've been here for 4 billion years.

➤ Microbes are found everywhere on Earth, even inside volcanoes!

➤ Some microbes can glow in the dark! People once used glowing pieces of fungus growing on wood to light their way.

➤ Humans would not be able to live without microbes. Some microbes produce oxygen which we need to breathe and others help plants to grow which we eat!



# Microbes!

- Microbes appeared on earth about 3.5 billion years ago.
- There are more microbes than all other animals and plants in the world.
- Some microbes live in places where nothing else can live.
- If there were no microbes, there would be no people!
- Microbes come in all shapes and sizes

## 1: Fungi

- The giants of all microbes!
- Fungi can be good and bad – good fungi can be used to make bread (yeast) or antibiotics. Bad fungi can cause mould on bread or diseases such as athletes foot!



## 2: Virus

- Viruses are parasites - they need to live inside the cells of animals, plants and even other microbes to live!
- There are very few good viruses and most viruses make us ill!

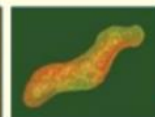
## 3: Bacteria

- Bacteria are found EVERYWHERE including all over our bodies.
- There are three different shapes of bacteria and scientists use these shapes to help identify them:

Balls (Staphylococcus)



Spirals (Campylobacter)



Rods (Lactobacillus)

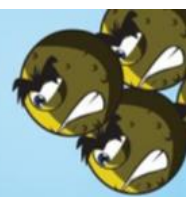


## Good Microbes

- Most microbes are good for us and do **not** cause disease.
- Microbes generate at least half the oxygen we breathe.
- Microbes live on the roots of plants and help them absorb food and water.
- Microbes are responsible for creating foods such as wine, cheese, vinegar, yogurt, and chocolate!

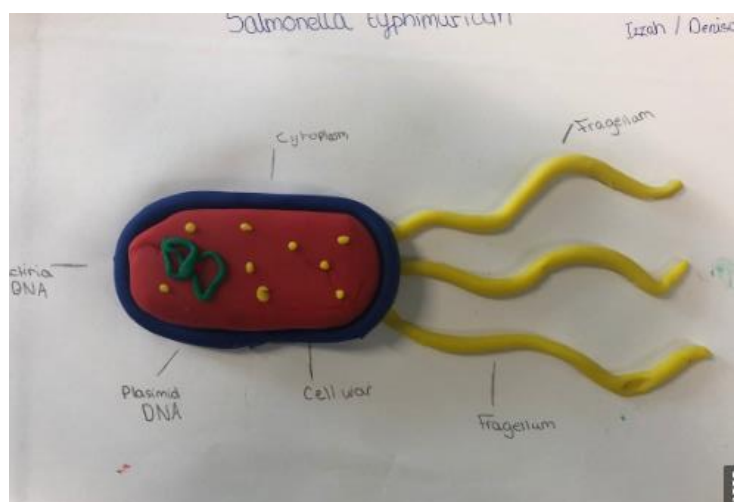
## Bad Microbes

- Some microbes can be harmful to humans and cause disease or illness.
- The bad microbes are known as **pathogens** but are sometimes called bugs or germs.
- Pathogens spread by close contact, coughs, sneezes, food water and animals.
- Disease causing microbes that spread from person to person are known as infectious.
- Bad microbes love it when you, your home, school or environment is unhygienic or dirty.
- Remember, microbes multiply very fast so it only takes one bad microbe to get inside your body and make you sick!
- Many of our everyday illnesses are caused by viruses e.g. ear ache, colds, flu, most coughs and sore throats!



### Task:

1. Research types of microbes. What is it? What does it do? It is harmful or helpful?
2. Choose a microbe and create it using a variety of materials



WC 13.07.2020

Science Lesson 6

Useful websites:

<https://www.amnh.org/explore/ology/microbiology>



<https://www.youtube.com/watch?v=aPmPep2r6uo>





### All about micro-organisms

Micro-organisms (also known as **microbes**) cannot be seen by the naked eye (micro means tiny and organism means a living creature); many hundreds of them would fit on the full stop at the end of this sentence.

**They are found everywhere**, in soil, air, water, on your skin and in your guts. Most of the time, when they are in the right place the majority of micro-organisms are **not harmful to people** and often do a lot of good such as breaking down waste and making bread. We couldn't live without them!

**There is a huge variety of micro-organisms.** They can work alone or in colonies. They can help you or hurt you. Most importantly, they make up the **largest number of living organisms** on the planet. There aren't millions, billions, or trillions. There are trillions of trillions of trillions of microbes around the Earth. Maybe more!

The **five types of living micro-organisms** are bacteria, viruses, fungi, algae and protozoa.



[https://e-bug.eu/lang\\_eng/UK%20KS1%20Pack/Microbe%20Mania/Microbe%20Mania%20FULL%20PACK.pdf](https://e-bug.eu/lang_eng/UK%20KS1%20Pack/Microbe%20Mania/Microbe%20Mania%20FULL%20PACK.pdf)

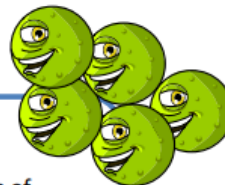


## Microbe Mania Fact Sheet



### What is a microbe?

Microbes are also called germs or bugs. There are three types of microbes: bacteria, viruses and fungi. Some microbes can make us ill, but most are very useful to us.



### Where are microbes found and what do they look like?

Microbes are found everywhere! They come in all shapes and sizes. See some pictures of microbes on our Microbe Mania poster.

