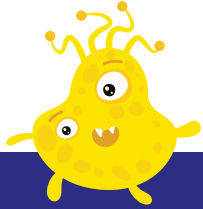


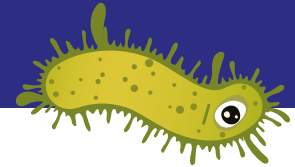


MISSION MICROBE



Mission Microbes Five Step Quest follows the journey of germs that cause illnesses and what children can do to stop themselves, family and friends from getting ill.

The concepts covered by **Mission Microbes Five Step Quest** include what a germ is, germs being invisible to the naked eye and how they are transferred and cause illness.



To finish the five-step quest, children must be able to show they know how to protect themselves against germs by answering the following questions correctly (either as a whole group, or individually). We also have additional information below for educators.

Q1: What is a germ?

Germs are invisible, you can only see them with a microscope, but although germs are invisible, they can make us poorly if they get into our bodies.

Q2: Where do germs live?

Germs are everywhere but not all germs are harmful to us. The germs that ARE harmful to us tend to be in places such as toilets, on surfaces, the floor, the rubbish bins. They are also in coughs and sneezes.

Q3: How are germs spread to other people?

We can spread germs to other people by touching things when we haven't washed our hands. For example, if we go to the toilet without washing our hands, everything we touch will then have our germs on it. Then, when people touch the same places, they will get our germs

on their hands. We can also spread germs when we cough or sneeze and somebody breathes the germs in.

Q4: How can we stop germs spreading?

We can stop germs from spreading by washing our hands with soap and water and then drying them. If we catch the germs from our coughs and sneezes in a tissue and then throw it away, the germs are gone and not on our hands. If the germs go into our elbow, we must make sure we wash those clothes! Catch our germs so we don't make our family and friends poorly.

Q5: How can germs make us feel ill?

If we touch something with germs on and put our hands in our mouth, or breath in the germs from somebody's coughs and sneezes, the germs will travel into our bodies and could make us feel unwell.

Additional information for educators:



When leading this five-step quest with children, use the tips and questions below to give you and the children a greater understanding of the science behind germs.

The different types of germs -

Germs can either be a bacteria, a virus or a fungi.

Bacteria (good and bad germs) are living and can multiply independently, both in us and on surfaces. Viruses must have a host (humans) to multiply and cause disease, they only survive on surfaces for short period of time (a few days). Cleaning surfaces and washing hands can remove bacteria AND viruses and keep us healthy. Bacteria can be treated with antibiotics, however, antibiotics don't work against viruses or fungi. Fungi cell structure is more similar to humans and bacteria and viruses, most fungi are good for the environment, food, drink and medicine production. A few fungi can cause disease.

Good Germs

Reassure children that not all germs are bad for you and that many germs are good, they help you digest your food, they are in children's favourite foods like cheese and yoghurt. Also, germs help children build up their immune systems to be strong and healthy.

The Germs are Hiding

Explore with children the idea of germs hiding, so even though they can't see the germs, they ARE there and can make you poorly. Discuss how touching your face with your hands can transfer germs into your body via your mouth, nose and eyes and then make you poorly. Germs can get on your hands from coughing and sneezing on them. This is why it is so important for children to frequently wash their hands to remove the germs.

The Germs are Gone

Although germs cause illness, they are easily removed from hands by washing with soap. Help children wash their hands with water, soap (bubbles, bubbles, bubbles), rinsing and drying to remove all the germs. This should be encouraged, particularly after coughing and sneezing into their hands, and always before eating meals. Ensure that the towels children use to dry their hands are clean and changed regularly, as towels harbour germs. Germs can be removed from surfaces such as toys by washing them using soapy water or a safe disinfectant spray.

By children catching coughs and sneezes in a tissue or in their elbow (if there is no tissue available) they are preventing their germs being passed on to friends and family. It is important that the tissue is thrown in the bin to stop other surfaces becoming contaminated from it and clothes should be washed using the highest temperature the clothes allow with detergent.

More Germs (Viruses)

Viruses replicate inside a human cell and use the tools of our cells to make more viruses, this can make us feel poorly. These viruses then go on to infect another person or contaminate a surface. It is important for children to understand that if they stop their germs being passed on to someone else, they stop others becoming poorly, and are therefore superheroes!

