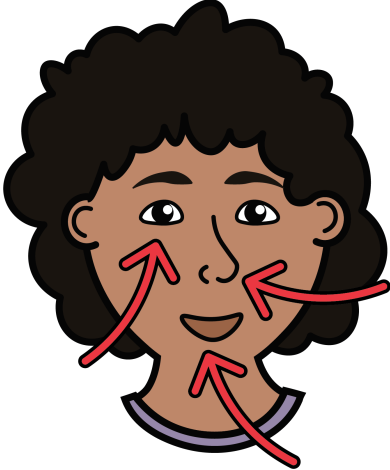
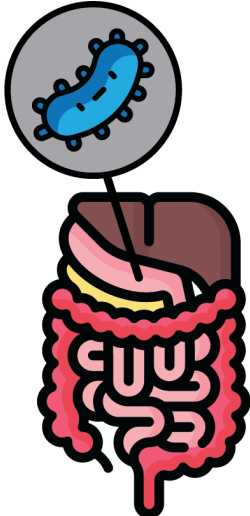



2.4 – Investigating Foodborne Pathogens

Body Defence Systems

Our bodies work hard to protect us from harmful bacteria, parasites and viruses.

Let’s take a look at how pathogens travel through our bodies, where they thrive and what our body does to help us!

1. Mucous Membrane	2. Digestive Tract	3. Immune System
<p>The first line of defence is our mucous membrane.</p>  <p>When bacteria enter our body through our nose, eyes or mouth, it signals our body to create more mucous.</p> <p>Mucous keeps the spaces between our cells tight to prevent dangerous bacteria from getting through!</p>	<p>Next up is our digestive tract. This is a long, twisting tube that is made up of different organs all the way from the mouth to the anus.</p>  <p>There are lots of barriers in our digestive tract that can kill bacteria or prevent them from multiplying. Stomach acids are one example.</p>	<p>We can’t forget about our immune system.</p>  <p>Our immune system creates lots of substances (like antibodies, for example) that will attack any harmful microorganisms that get through the other barriers.</p>

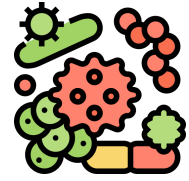
Name: _____

Date: _____

Pathogen Detectives

Welcome to the pathogen detective task force. It's time to put on your detective hats and dive into the world of these tiny organisms!

In this activity, you will become a detective on a mission to investigate the tiniest organisms around. Not all pathogens are harmful, but some are villainous to our health, and it is up to you to investigate their sneaky ways into our bodies!

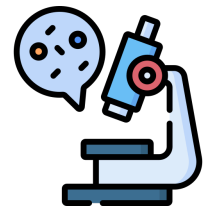


1. Have each person in your group choose a pathogen to investigate. Will it be *Salmonella*, *Listeria*, *E.coli*, norovirus or *Cyclospora*?
2. Write facts about your chosen pathogen in the “Pathogen Busters Graphic Organizer.” Use the *Foodborne Pathogens* presentation to help.

Note: If you want to do more research, ask your teacher what your options are!

3. Once your research is complete, your group will come together and showcase your learning about the five pathogens by creating one of the following:

- an art piece
- a poster
- a slideshow
- a web page
- a video
- your choice _____



4. Your group will share its pathogen discoveries with your fellow classmate detectives. Each group will take the stage to present their findings.
5. If you learn more information about the pathogen you researched from your peers, add it to your “Pathogen Busters Graphic Organizer.”

Name: _____

Date: _____

Pathogen Busters Graphic Organizer



Fascinating Facts

Where Is It Found?



Pathogen: _____



Impacts on the Body

How to Protect Yourself



Name: _____

Date: _____



3-2-1 Response

After each group has presented their pathogens to the class, write about your biggest takeaways from this activity. Share what you have learned with your family!

Three things I **learned** ...

-
-
-



Two things I **found interesting** ...

-
-



One **connection** I **made** to food safety ...

-

