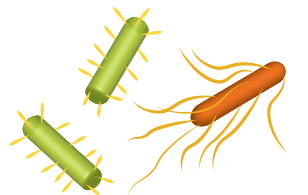
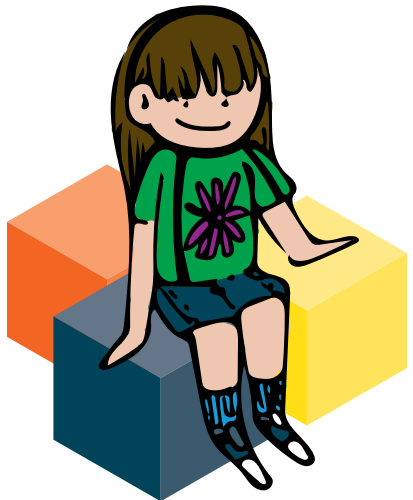
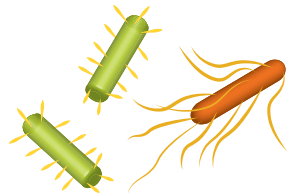
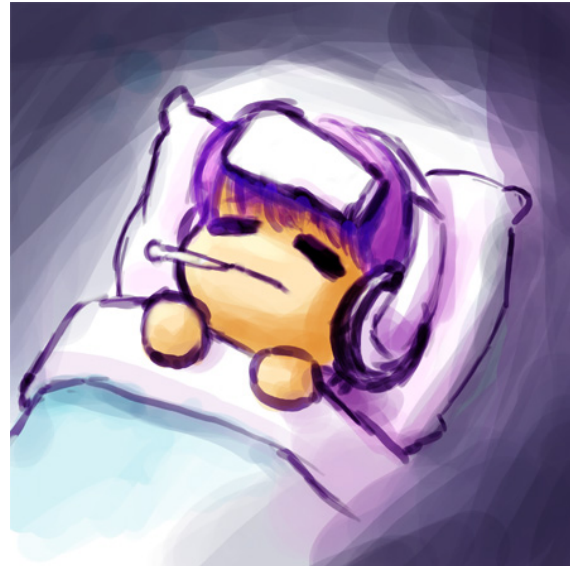
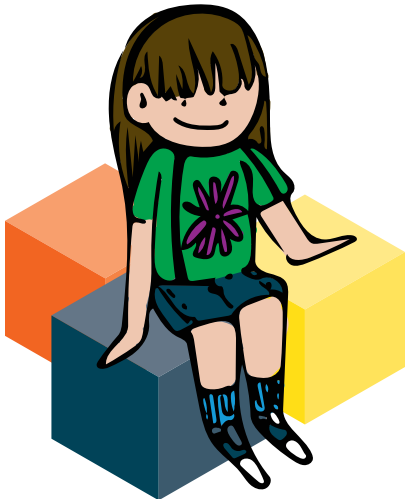


# Microbes in History



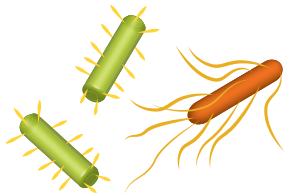
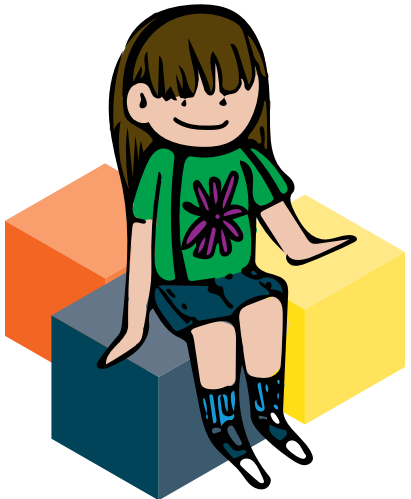
# Microbes in History

- From the beginning of life on earth, microbes have existed. When humans arrived, these microbes had an influence on humans.
- As we already know, some microbes can help us, but some can make us very sick.



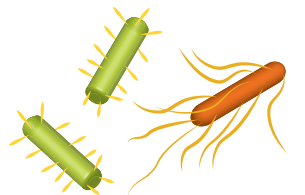
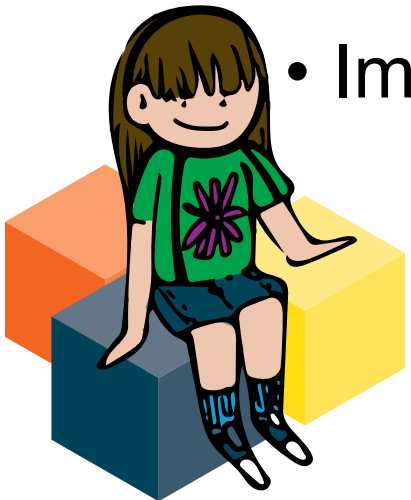
# Epidemics

- An epidemic is when a disease or illness infects many more people than what was expected within a country or part of a country.
- It is wide-spread, but not wide-spread throughout a huge region.



# Pandemics

- A pandemic is when the disease or illness infects numerous amounts of people over a wider spread geographical area than an epidemic.
- A pandemic is usually caused by a new strain of virus to which humans have very little immunity because they have not been exposed to it before.
- Immunity is the body's ability to resist infection.



# Examples in History

Some examples of epidemics and pandemics are:

Flu

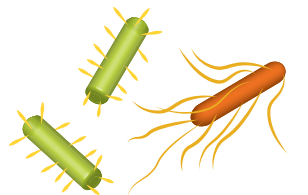
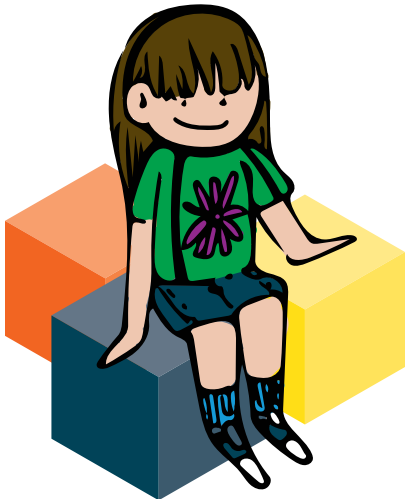
Bubonic plague

Smallpox

Yellow fever

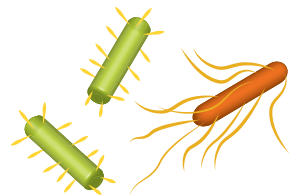
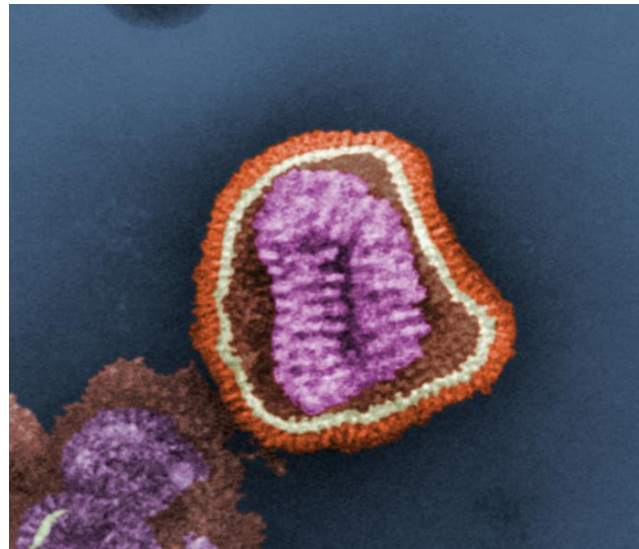
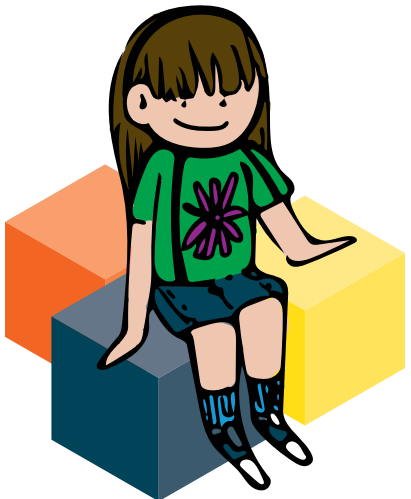
Measles

Malaria



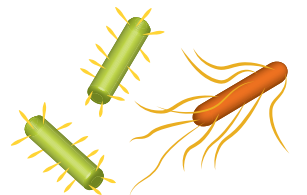
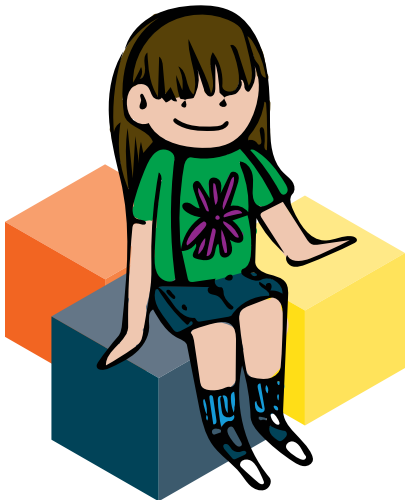
# Flu

- Microbe that causes it: Influenza
- Type of Microbe: Virus
- Symptoms: Fever, cough, sore throat, runny nose, headache, body aches, chills, fatigue vomiting, nausea, diarrhea



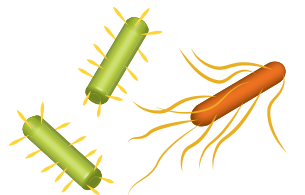
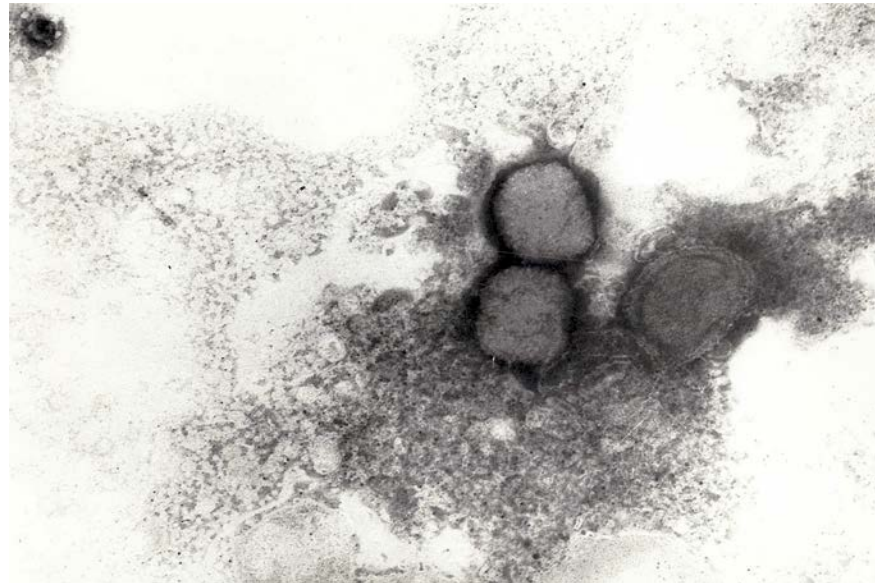
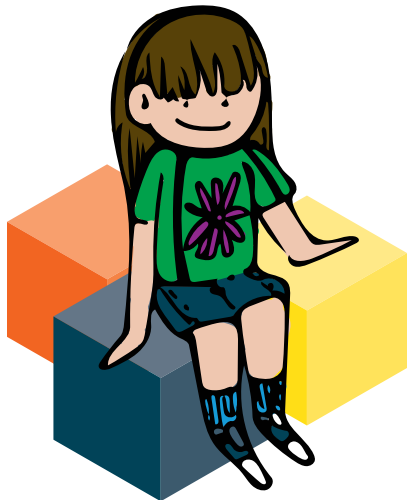
# Bubonic Plague

- Microbe that causes it: *Yersinia pestis*
- Type of microbe: Bacteria
- Symptoms: Fever, chills, headache, muscle pain, weakness of the body, seizures, can develop big buboes which are infected, discolored lymph nodes that can reach the size of an egg



# Smallpox

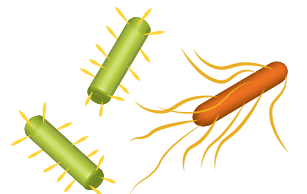
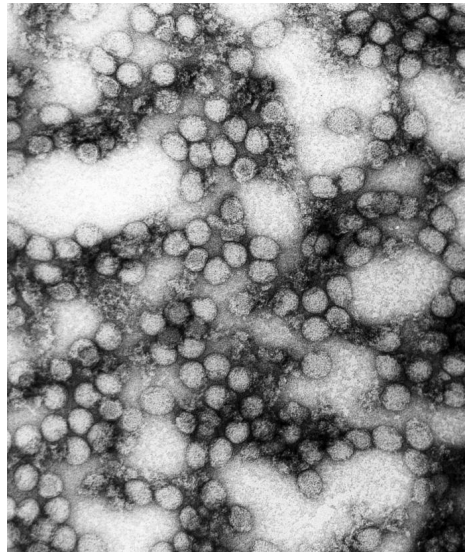
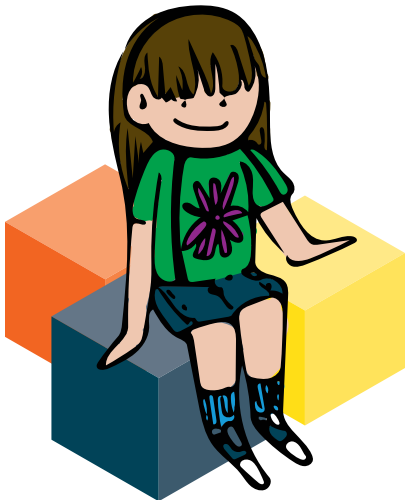
- Microbe that causes it: *Variola*
- Type of microbe: Virus
- Symptoms: Fever, discomfort, headache, severe fatigue, severe back pain, vomiting





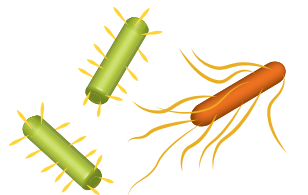
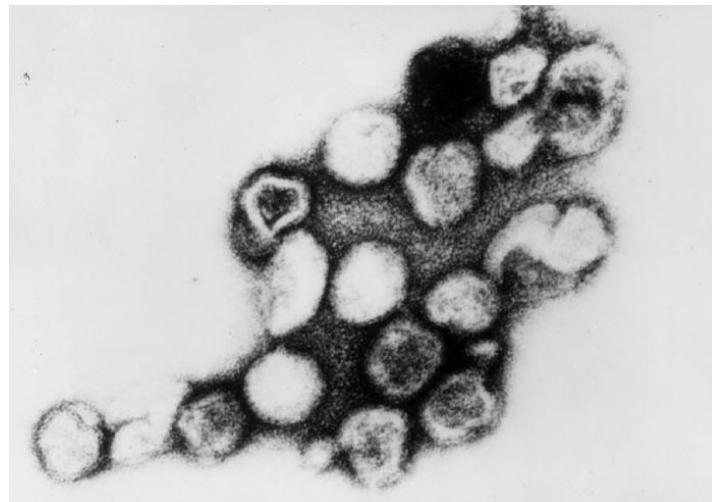
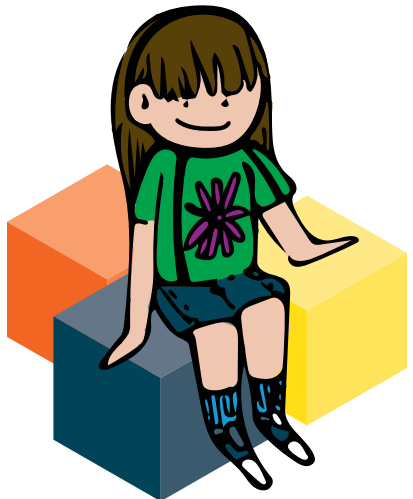
# Yellow Fever

- Microbe that causes it: *Flavivirus*
- Type of microbe: Virus
- Symptoms: Jaunice (yellow-looking skin and yellow-looking eyes), inflammation of the liver, internal bleeding, vomiting blood, shock, multisystem organ failure



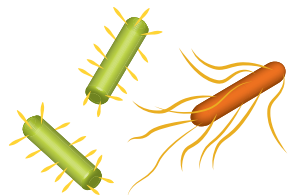
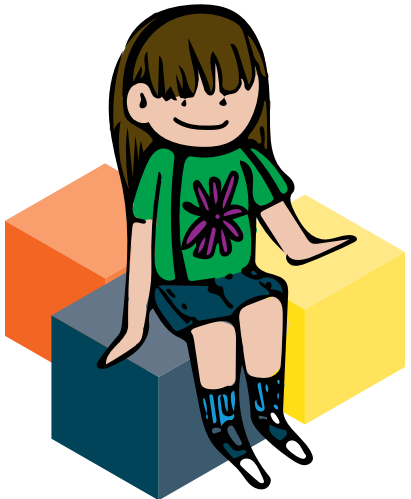
# German Measles

- Microbe that causes it: *Rubella*
- Type of microbe: Virus
- Symptoms: Fever, runny nose, headache, muscle pain, red eyes, swollen lymph nodes, a pink rash that starts on the face and spreads over the body



# Malaria

- Microbe that causes it: *Plasmodium falciparum*
- Type of microbe: Protozoa
- Symptoms: Shaking, chills, high fever, profuse sweating, headache, nausea, vomiting, diarrhea



# Now it is your turn!

- Look up more information about these different microbes.
- Look up different pictures and facts about different epidemics and pandemics that have plagued our earth. Discover!
- After researching, prepare for your task.

