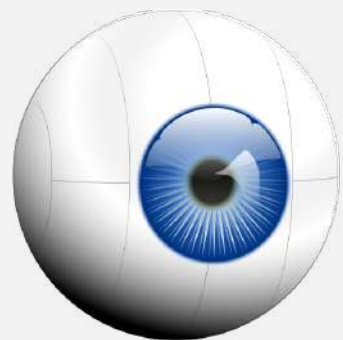# Viruses Stations

Self Directed Activity

Directions - Proceed through each of the following stations. Following the directions as written. If a question arises, talk amongst your group members first, then if a consensus is not reached, please seek assistance from your instructor

Station 1	Station 2	Station 3	Station 4
Watch It	Video It	Write It	Examine It

Viruses Stations

Self Directed Activity

Directions - Proceed through each of the following stations. Following the directions as written. If a question arises, talk amongst your group members first, then if a consensus is not reached, please seek assistance from your instructor
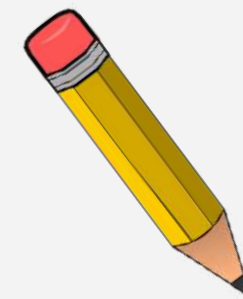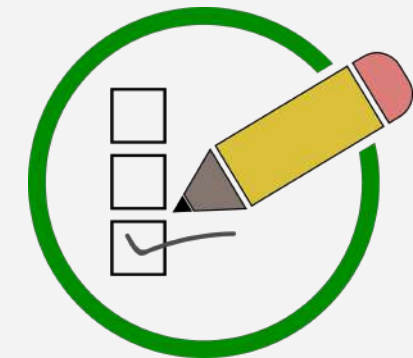
Station 5	Station 6	Station 7	Station 8
Answer It	Perform It	Read It	Evaluate it

Watch It – Station 1

What do antibiotics work on? Can viruses reproduce on their own? Why or why not?

Question 1

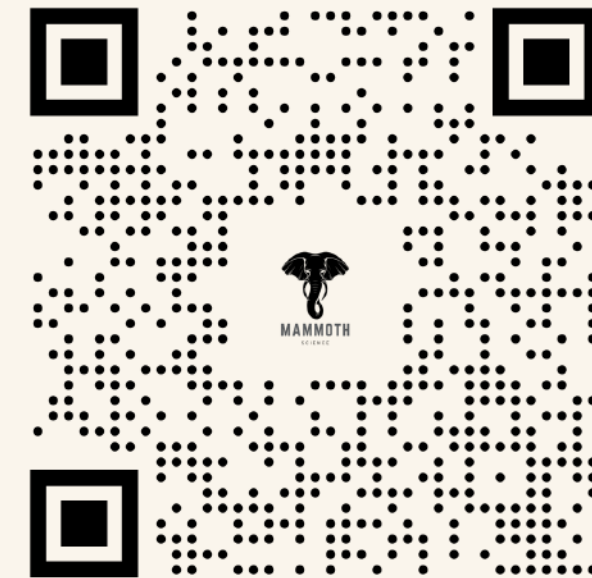*Does the host cell realize when a virus attaches to it?*

Question 2

Lyse means to...

Question 3

Directions

Watch the following video

Answer t   left from the vi   vided

Which cycle is longer?
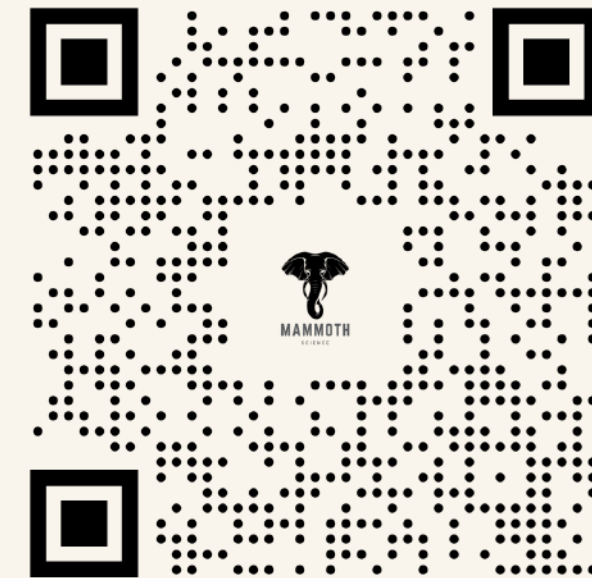
Question 4

What is the end result of the lytic cycle?

Question 5

Bacteriophage is a virus that goes after _ _ _ _ _ _ _ .

Question 6

Directions

Watch the following video

Answer t... ...left from
the vi... ...vided

Stations 1-4

Besides the type of cells they attack, why is HIV so hard for scientists to treat?

Question 7

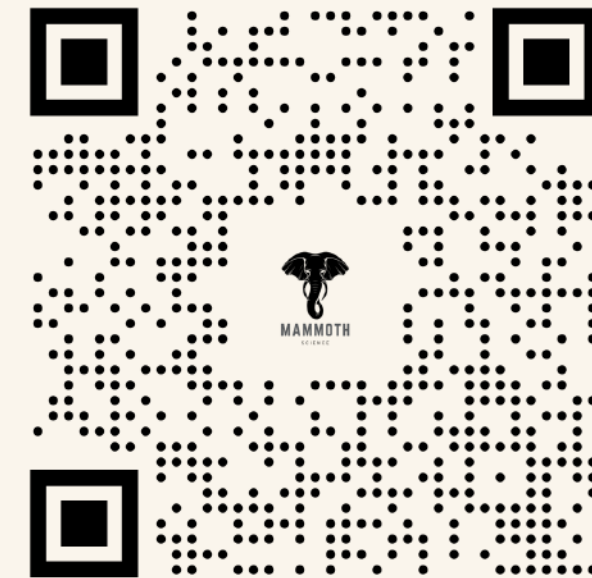*Antibiotics don't kill viruses, so how do we keep from getting diseases caused by viruses?*

Question 8

What type of cells in the human body serves as host to HIV?

Question 9

Directions

Watch the following video

Answer t   left from
the vi   vided

Stations 1-4

Station 2 – Video It

Directions

Make a video of about 3 minutes. Your video should include the following information, using the sentence stems right.
Insert (copy & paste) your video link into your answer doc

Some Video creation suggestions:

- Loom
- Screencast-o-matic
- Screencastify
- Animoto

"Viruses are not considered alive because..."

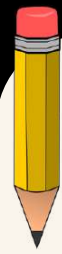*"Viruses need a _ _ _ _ _ to be able to reproduce because..."*

"The steps in the lytic cycle are..."

"The steps in the lysogenic cycle are..."

"The types of viruses are..."

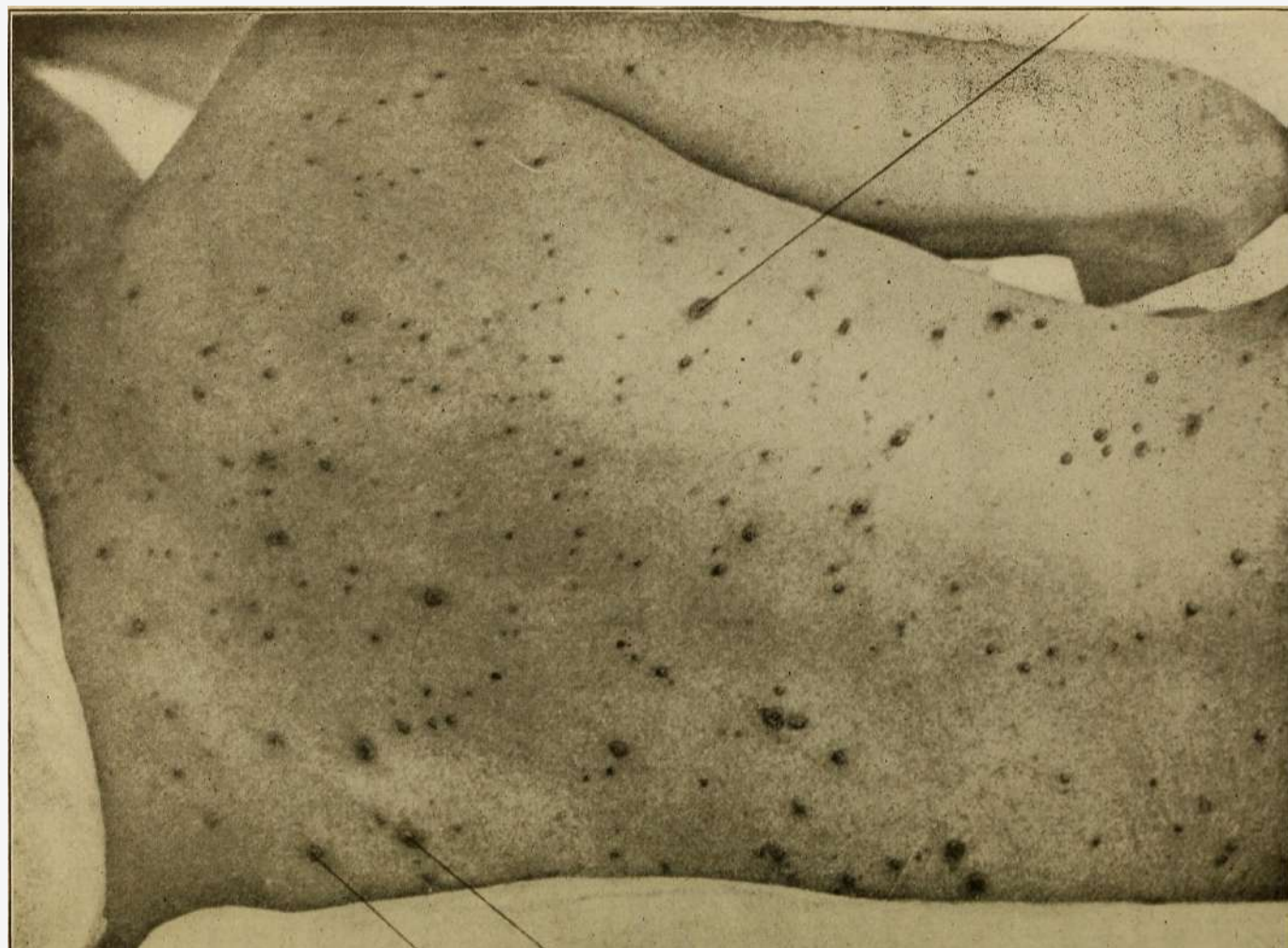*"Examples of a virus that undergoes the lytic cycle is..."*

"Examples of a virus that undergoes the lysogenic cycle is..."

Write It

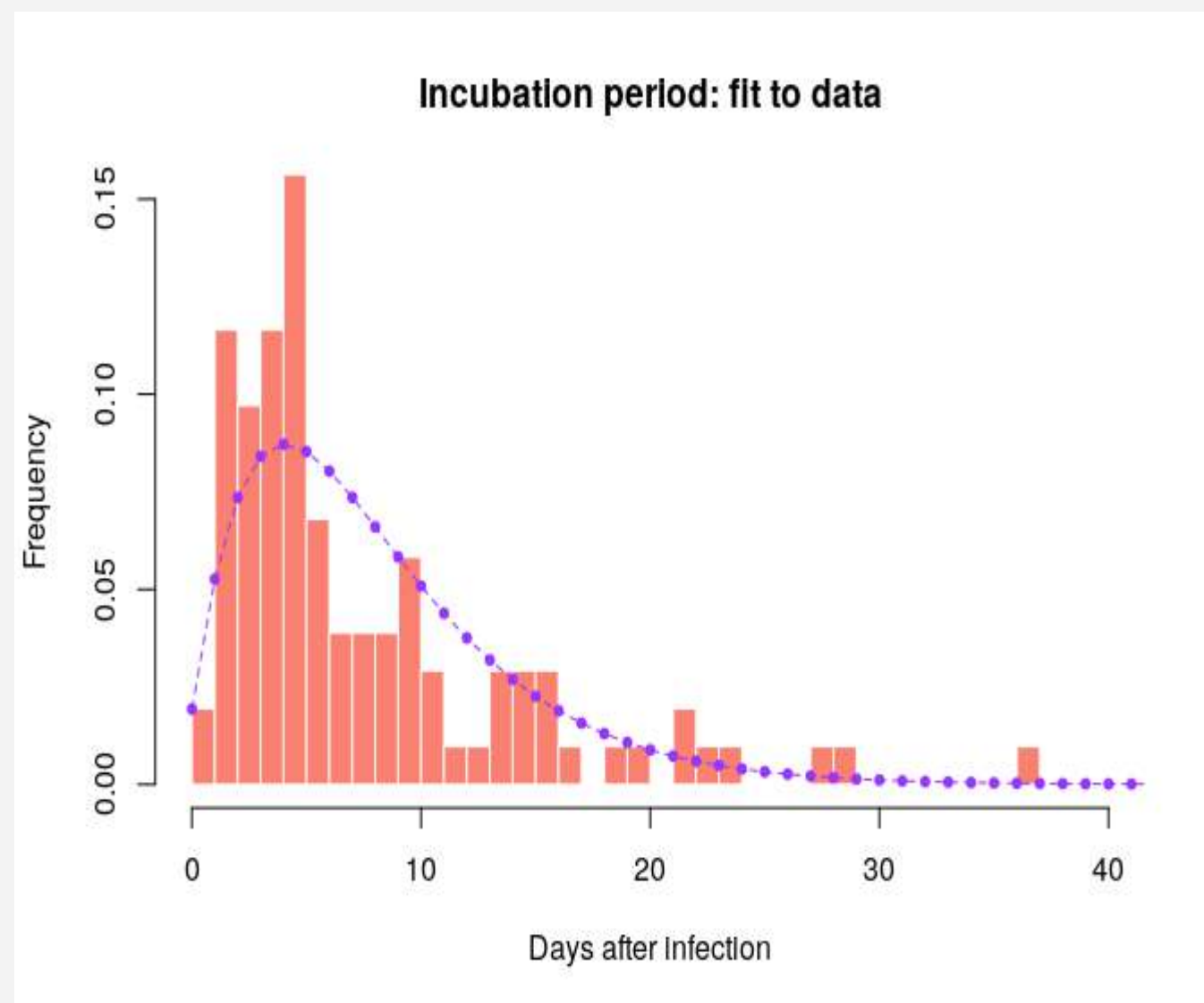In a quickwrite (3-5 Sentences) - Using the image below…

Shingles and chickenpox are both viral diseases caused by the varicella-zoster virus. Shingles usually occurs years after a person has had the chickenpox. Based on this information, what kind of infection cycle do you think the varicella-zoster virus has? Link the infection cycle to the appearance of shingles years after initial infection with the virus.
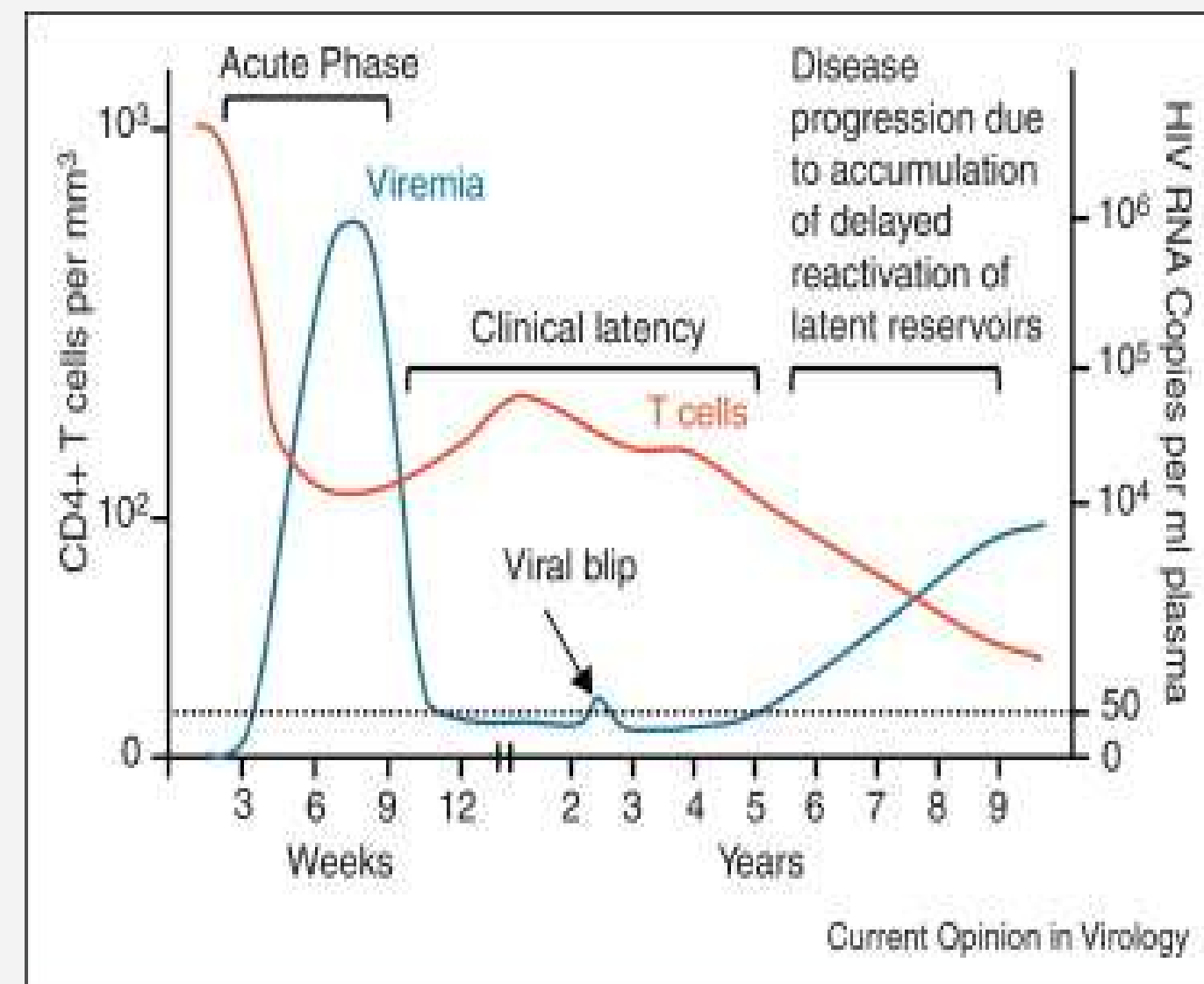
Stations 1-4

Examine It

Determine the modes of infection for each virus below. Explain your reasoning

Virus 1

Incubation period: fit to data

Virus 2

Current Opinion in Virology

Answer It

1. Define the term virus, and describe the basic structure of a virus.

2. Compare and contrast a prophage and a bacteriophage.

3. Viruses are smaller and simpler than living cells. Why is it unlikely that viruses evolved before cells?

4. Bacterial diseases can be prevented by vaccines and by disinfectants. Contrast these two ways of preventing bacterial infections.

5. All living things need proteins to survive. However, some proteins are harmful. How can a protein cause disease?

6. Describe how viral infections are treated and prevented.

7. Compare and contrast a virus with a cell.

8. How do viruses cause infection?

9. What are antibiotics? How do they work?

Perform It – Station 6

Use the QR code right or follow the LINK here. Solve a level 1 or level 2 outbreak using the tools in the simulation

Directions

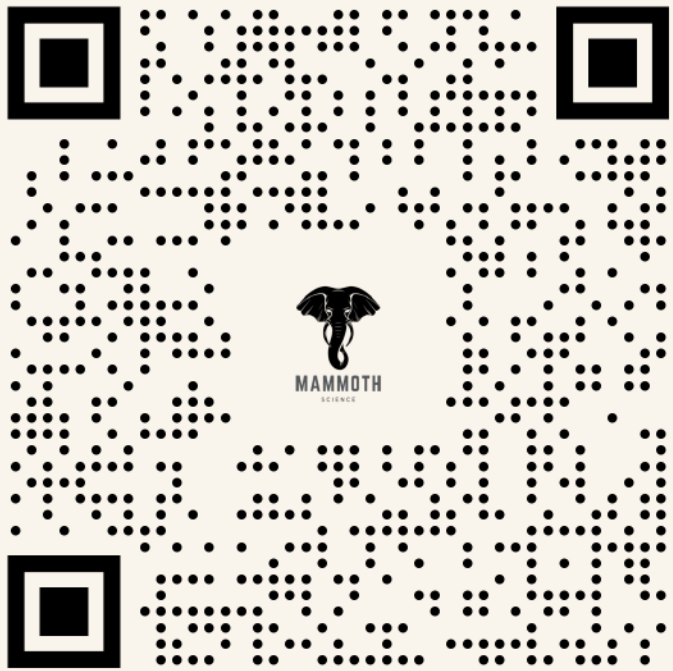*What were the tools used in the simulation to help slow the spread of the outbreak?*

Question 1

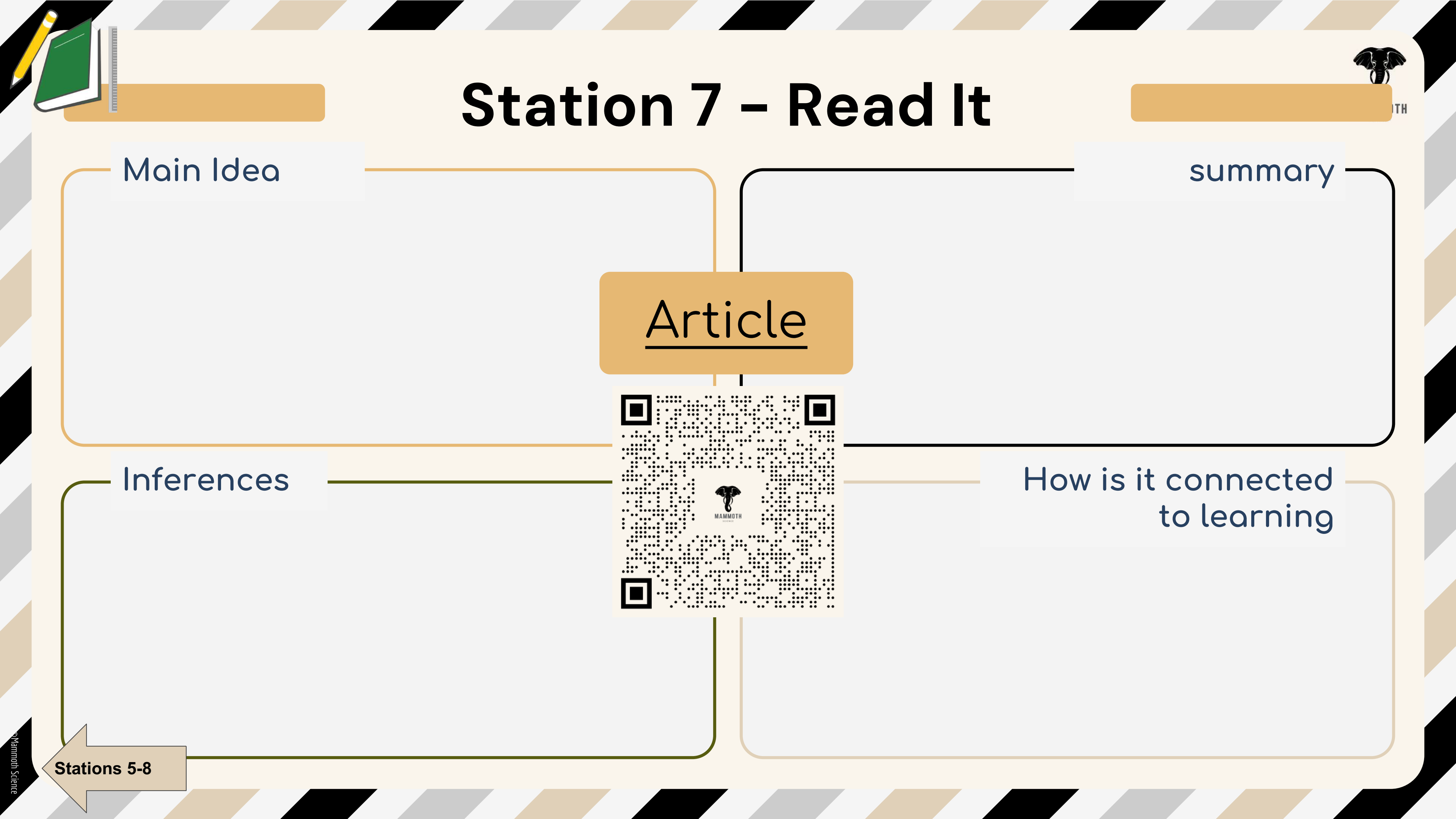*Explain the difference between your outbreak using the following terms: Endemic, epidemic, and pandemic*

Question 2
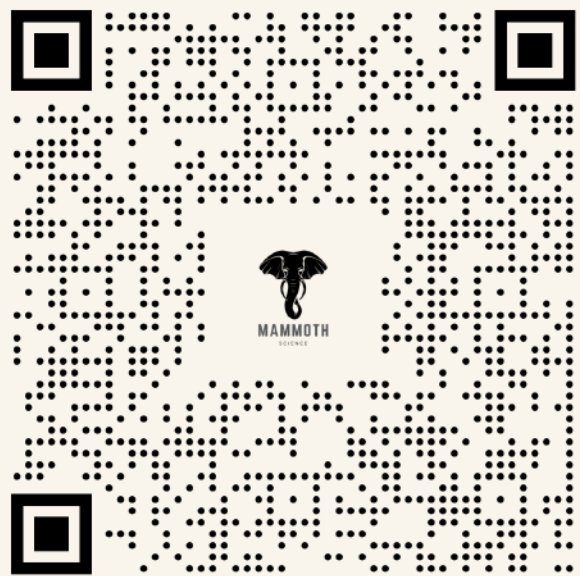
Directions

Watch the following lab simulation

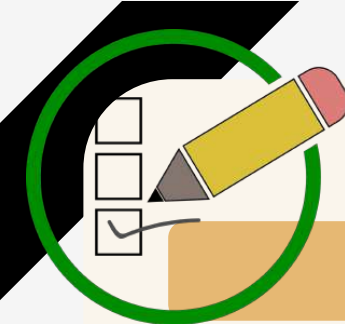Answe eft from the ded

Station 7 – Read It

Main Idea

summary

Article

Inferences

How is it connected to learning

Station 8 – Evaluate It

what do I know?

List at least 5 items:

what do I wonder?

List at least 4 items:

what have I learned?

List at least 5 Items: