

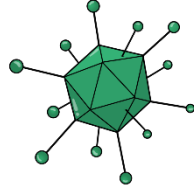


Amoeba Sisters | Video Recap

NAME: _____

Amoeba Sisters Video Recap: *Viruses*

1. Are viruses considered to be living organisms? Why or why not?



2. Are viruses considered to be cells? Would they be included in these cell theory statements?

Modern Cell Theory

The cell is the smallest living unit in all organisms.



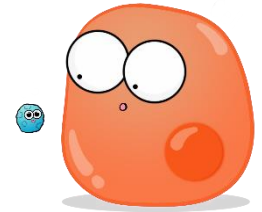
All living things are made of cells.



All cells come from other pre-existing cells.



3. Compare and contrast a **virus** to a **cell**. What would be some differences? What are some similarities?



Determine whether the following statements are **TRUE** or **FALSE** by applying what you have learned. If false, you will be asked to explain why.

4. _____ Viruses can be treated with **antibiotics**.

If false, why? [If true, leave blank] _____

5. _____ Viruses are smaller than the **hosts** they infect.

If false, why? [If true, leave blank] _____

6. _____ Viruses are **prokaryotes**.

If false, why? [If true, leave blank] _____

Determine whether the following statements are **TRUE** or **FALSE** by applying what you have learned. If false, you will be asked to explain why.

7. _____ Virus structure includes **biomolecules** such as **proteins** and **nucleic acids**.

If false, why? [If true, leave blank] _____

8. _____ Viruses require a **host** to **reproduce**.

If false, why? [If true, leave blank] _____

9. _____ Viruses *only* target **animals** (including humans).

If false, why? [If true, leave blank] _____



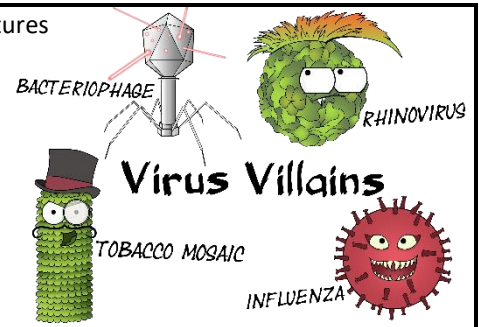


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10. Viruses come in many different **structures**. What would these different virus structures likely have in common? What might be different?



The Lytic Cycle

It is time to focus on how viruses reproduce by exploring the **lytic cycle**! For the following question numbers, illustrate the scenario described to show the virus and host cell.

The virus <u>attaches</u> to the host cell.	11.	The virus <u>inserts</u> its genetic material into the host cell (or the virus itself may be taken inside the cell where its genetic material will be used by the host).	12.
Based on the viral genetic instructions, the host <u>manufactures</u> and <u>assembles</u> copies of the virus.	13.	The newly formed viruses can <u>lyse</u> the host cell and now infect new host cells.	14.

The Lysogenic Cycle

15. Can you relate this illustration to how the **lysogenic** cycle would be different from the **lytic** cycle?

Operation Infiltration

