

# VIRAL INFECTIONS

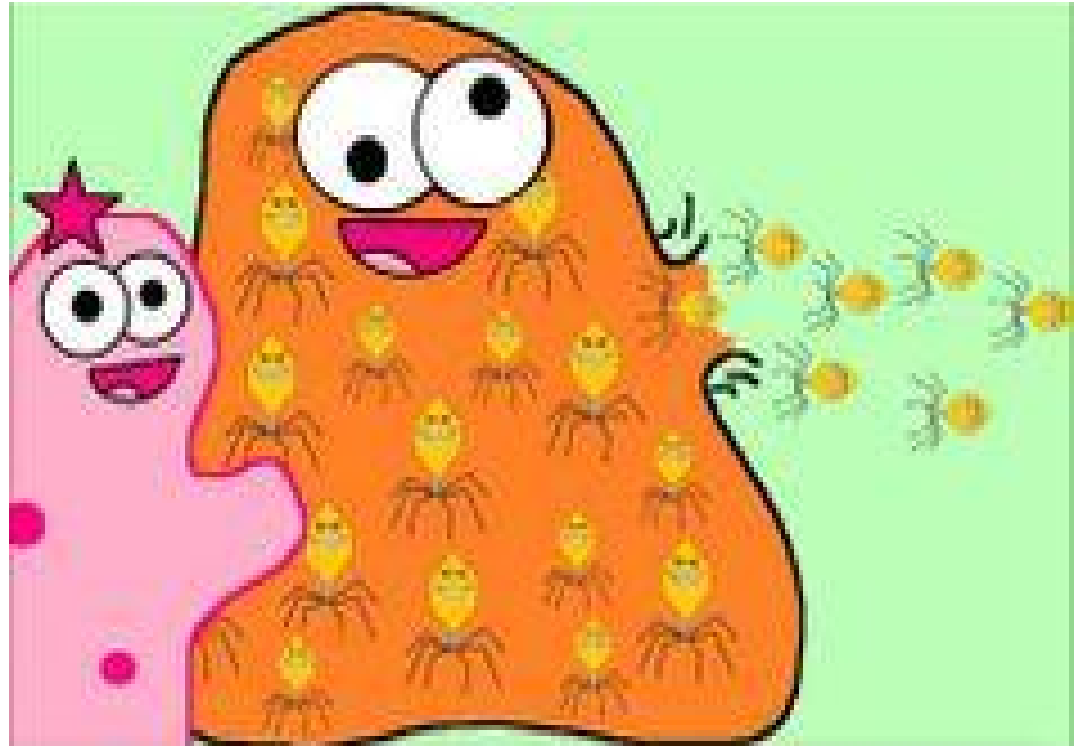
Once the virus is inside the host cell, 2 different processes may occur...



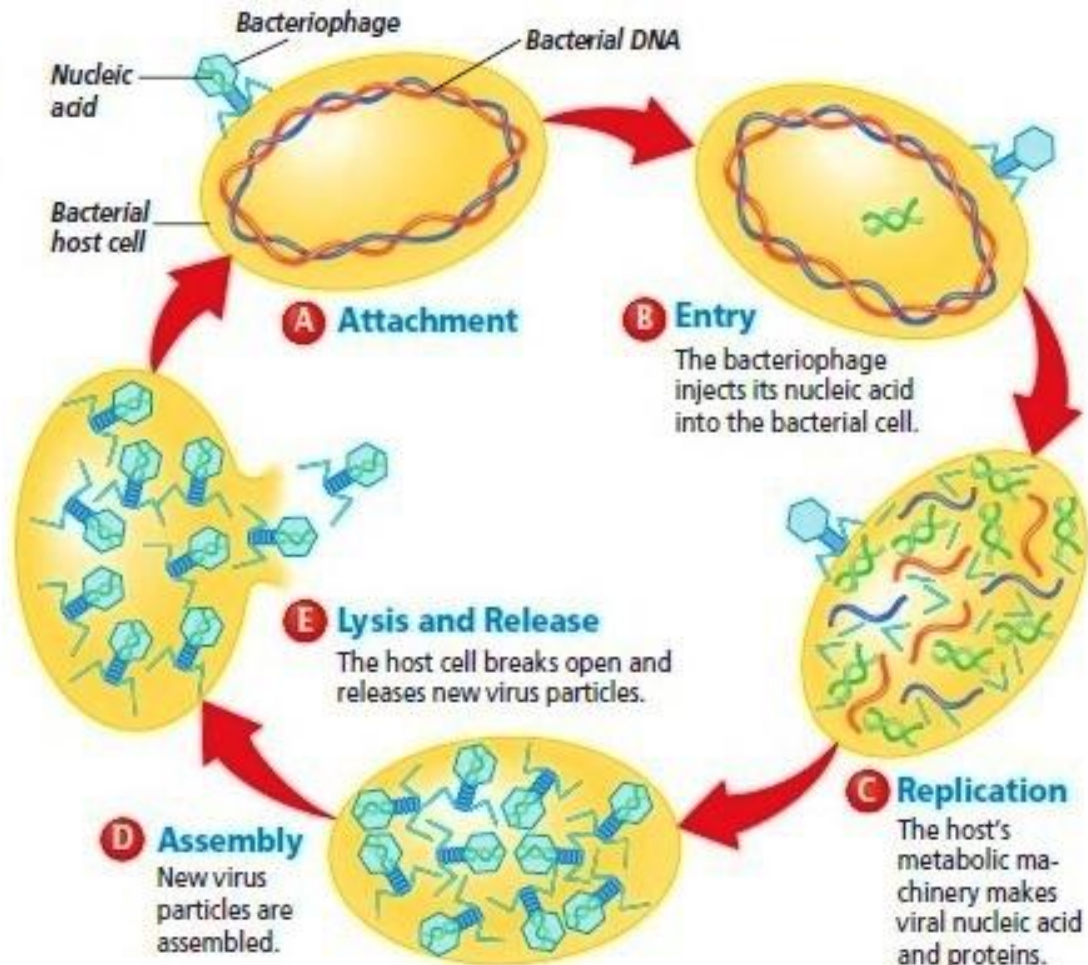
## Lytic infection:

virus enters a cell, makes copies of itself and causes the cell to burst... *kills the cell*

Lyse= to burst



In a lytic cycle, a virus uses the host cell's energy and raw materials to make new viruses. A typical lytic cycle takes about 30 minutes and produces about 200 new viruses.

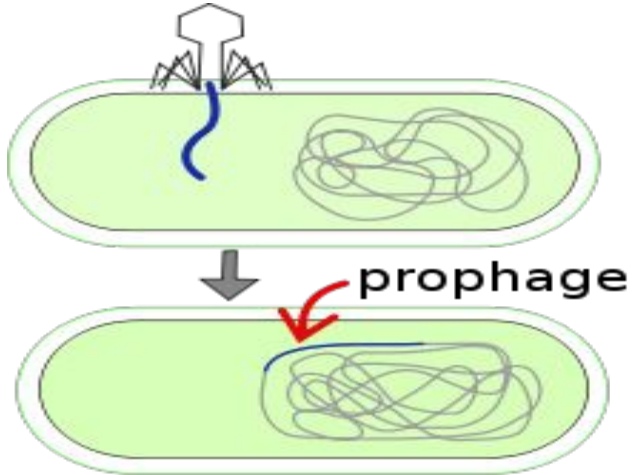


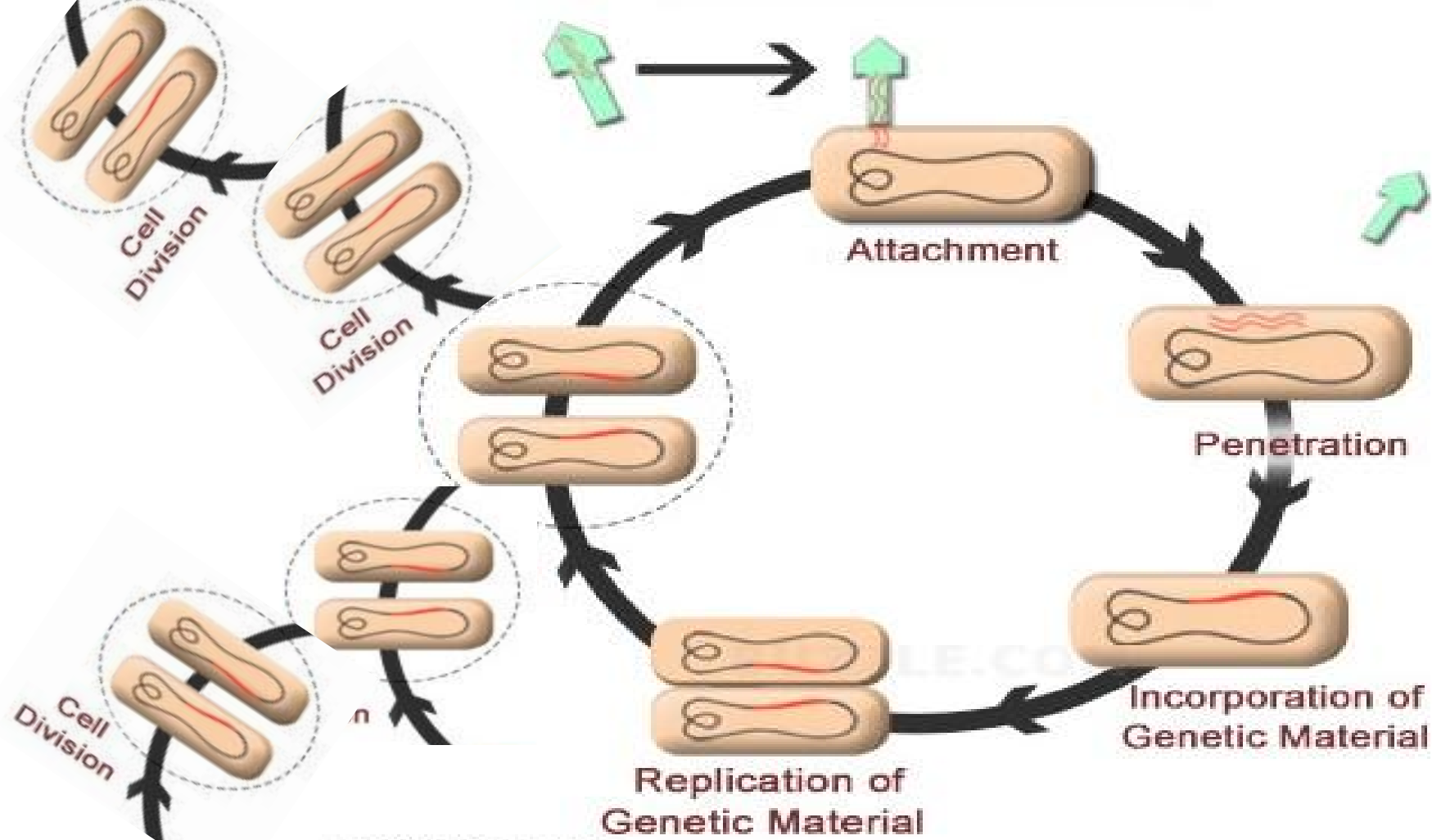


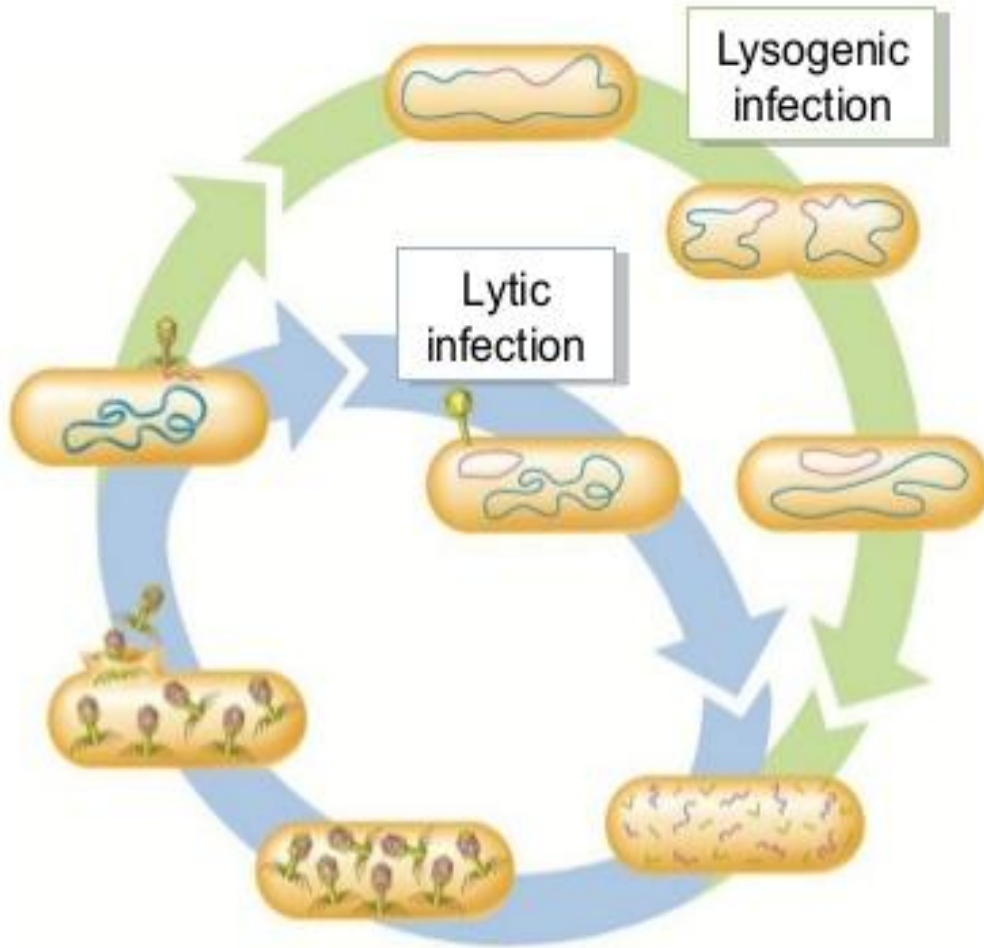
**Lysogenic infections**: a virus integrates its DNA into the DNA of the cell and the viral genetic information replicated with the host cell.



The viral DNA embedded in the host cell is called a **prophage**.







Eventually, a prophage will be activated and begin the lytic process of viral replication.

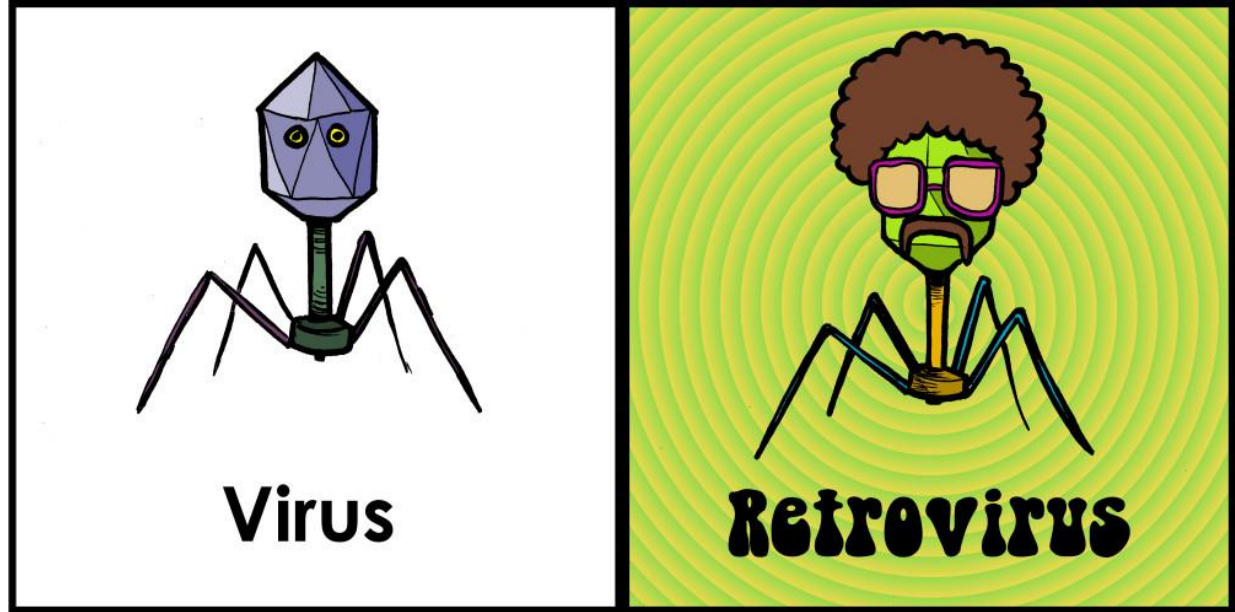
The host cell will be destroyed



**Retroviruses** contain RNA. Once they enter a cell they can make a DNA copy of their RNA and insert it to host DNA (like a prophage)

Retro = backwards

Which of these viruses contain DNA?



DNA

RNA

# VIRUS REVIEW:

- What sort of living thing could you compare a virus to?
- Are viruses alive? Why or why not?
- How can we compare viruses to living cells?

