Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour:\_\_\_\_

**Viruses – Latin for Poison**

**A virus is \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_**

* Has \_\_\_\_\_\_\_\_\_\_ info
* Does not have:
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (by itself)
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (no cells)

**Size**

* Very \_\_\_\_\_\_ - much smaller than bacteria
* They can only be seen through an electron \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Measured in millimicrons (1 thousandth of a micrometer)

**How are viruses classified?**

* Two ways
  + Types of Nucleic Acid
    - \_\_\_\_\_\_
    - \_\_\_\_\_\_
  + \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_
* DNA Virus
  + “\_\_\_\_\_\_\_\_\_\_\_\_\_\_” virus
* RNA Viruses
  + \_\_\_\_\_\_\_\_\_\_\_
  + Uses \_\_\_\_\_\_\_\_\_\_\_ transcriptase to make DNA

**Structure**

* The structure \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_
* All have a \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ (RNA or DNA)
* Capsid is a \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ around the NA
* Complex viruses can have \_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_...
* Bacteriophage – this virus affects \_\_\_\_\_\_\_\_\_\_\_\_\_

**Reproductive Cycle**

* Injection: virus \_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_ of \_\_\_\_\_\_ to \_\_\_\_\_\_\_\_ nucleic acid
* Reproduction: all viruses need the tools that cells use to reproduce, they \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_
* Lysis: when enough \_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_, they \_\_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_ it

**Disease**

* Viruses are known to be responsible for over \_\_\_\_ diseases
* Each virus attacks a \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_ of \_\_\_\_\_\_
* The cell it attacks determines what the disease will look like
  + Flu Virus – attacks cells of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ tract… so you have respiratory problems
  + Polio - \_\_\_\_\_\_\_\_\_ system… paralysis
  + HIV - \_\_\_\_\_\_\_\_\_\_\_ system… immune suppression
    - HIV: human immunodeficiency virus
    - AIDS: acquired immune deficiency syndrome

**How do you fight a virus?**

* The \_\_\_\_\_\_ attack \_\_\_\_\_\_\_\_\_ a response from the \_\_\_\_\_\_\_\_\_ system
* If your immune system isn’t enough…
  + \_\_\_\_\_\_\_\_\_\_\_\_ medications
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* What is a vaccine?
  + \_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_ virus is injected into a person
  + The immune system attacks it
  + \_\_\_\_\_\_\_\_ how to fight it
  + Ready to attack as soon as the real virus attacks