



Pathfinder's Name

Viruses

- ❑ 1. Describe or discuss the following with a group. If necessary research possible answers to these topics so that you can make meaningful contributions to the group.

- a. What does the word virus mean? Explain the controversy regarding whether it is alive or not.

- b. Name the distinctive characteristics of viruses and why they're not included in any kingdom.

- c. Name some morphological shapes of viruses and give an example of each.

- d. Explain the importance of vaccines to combat viruses. How do they work?

- e. Describe how viruses reproduce and how the genetic modifications called mutations occur and viral resistance.

- f. Have viral diseases ever been eradicated? Why is it difficult to treat patients with viral diseases?

- ☐ 2. Through pictures, video, or detailed descriptions, explain the difference in the following exanthematous or rash diseases:

- a. Rubella

- b. Measles

- c. Chickenpox

- ☐ 3. Choose three of the following viral diseases and describe their form of infection, symptoms and prevention. Demonstrate your learning creatively through a display, presentation, or prepared speech:

- a. Cholera

- b. Herpes

- c. AIDS

- d. Mumps

- e. Poliomyelitis

- f. Meningitis

g. Hepatitis

h. Dengue

Date completed _____

- ☐ **4.** Explain the difference between a cold and the flu. Why does the influenza virus cause periodic epidemics (like the Spanish flu, avian flu, H1N1, etc.)?

- ☐ **5.** What is the difference between a virus and a prion? Name a disease caused by a prion.

- ☐ **6.** Done one of the following:

- a.** Give a brief report about a viral pandemic and the impact it had / is having on the world.
- b.** Create a skit, multimedia presentation, or other interactive display that informs a 3rd world audience to the danger of one or more of these viruses and gives them training in how to combat or control the virus.
- c.** Have a Aid/relief worker give a talk or presentation about epidemics and virus control in third-world countries. Raise money as a group to support aid relief in the country(ies) the worker tells you about.

Date completed _____