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
- **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.

Skill Level 2

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