

# Viruses

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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

New in 2015

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