

**Viruses Pathfinder Honour**  
**Level 2**

1. What does the word virus mean? Is it a living organism?


2. What are the characteristics of viruses and why are they not included in any kingdoms?


3. Describe or draw some of the morphological shapes of viruses and give an example of each.


4. Why are vaccines important? And how do they work?


5. How do viruses reproduce? What are mutations and viral resistance?


6. Which viral diseases have been eradicated? Why is it difficult to eradicate disease?


7. Why is it difficult to treat patients with viral diseases?


8. What is the difference between the cold and the flu? Why does influenza cause periodic epidemics?


9. What is the difference between a virus and a prion? What disease is caused by a prion?


Homework:

1. Through pictures, video, or detailed descriptions, explain the difference in the following exanthematous or rash diseases:
  - a. Rubella
  - b. Measles
  - c. Chickenpox

DISEASE	RUBELLA	MEASLES	CHICKENPOX
Transmission			
Symptoms			
Complications			
Treatment			
Picture or description			

2. 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
  
3. Do 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 an 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.