**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block\_\_\_\_\_\_\_**

**Biology 9: Unit 2 Understanding Viruses Video**

While watching the video, answer the following questions.

1. Can we taste, smell or see a virus? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Influenza was named by 15th century Italians believed it was cause by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of stars and planets.

3. How long ago was smallpox described in Chinese literature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. How many different types of herpes are there? \_\_\_\_\_\_\_\_\_\_ Name one. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Kuru is only found in cannibal tribes in New Guinea. They get it by eating \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. In the 1930’s German scientist invented an \_\_\_\_\_\_\_\_\_\_\_\_\_\_ microscope that magnified \_\_\_\_\_\_\_\_\_\_ times.

7. Can a virus function independently? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Even germs can get \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

9. The Great Red Plague that struck in the 5th century may have been typhus or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

10. When they opened Egyptian tombs they found references to what could have been \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

11. Influenza pandemic of \_\_\_\_\_\_\_\_\_\_\_\_ struck every major US city.

12. Which killed more people WWI or the Influenza Pandemic? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. Flu originated in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then went to the US.

14. India lost \_\_\_ % of its population. Alaska lost \_\_\_% of its population.

15. Vaccine comes from a \_\_\_\_\_\_\_\_ disease called vaccinia (\_\_\_\_\_\_\_\_\_\_\_\_).

16. In the 18th century who was spared from smallpox? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. Chicken embryos are used to grow human viruses like \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

18. The flu virus has found a way around the immune system by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

19. Nobody knew that polio could be transmitted through contaminated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or spittle.

20. Franklin Roosevelt contracted polio after \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a chilly lake.

21. The rotavirus lives in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and kills over \_\_\_\_\_ million children a year.

22. The smallpox virus can only grow in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When did smallpox disappear from the earth? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

23. How many collections are left of smallpox? \_\_\_\_\_ Where are they? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

24. What weapon did Cortez use to conqueror the Aztecs? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

25. What did Lord Jeffrey Amherst give to Native Americans to transfer smallpox to their culture? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

26. Experts estimate that \_\_\_\_\_\_% of the \_\_\_\_ million species of the earth are unknown to us.

27. He waits for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to bite him. (YUCK)

28. From mosquitoes, the institute has found \_\_\_\_ viral strains the world never new before.

29. The virus that killed thousands of men in Korea was linked back to the urine of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that lived in rice paddies.

30. Saulk believes HIV is mutation of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ virus that first appeared centuries ago. It moved into the human population through the ritual use of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

31. HIV is one of the fast mutating \_\_\_\_\_\_\_\_ family.

32. IF their pressurized space suit should spring a leak, the air would rush \_\_\_\_\_\_\_ instead of \_\_\_\_\_\_\_.

33. Infectious diseases will never \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Virus is a part of \_\_\_\_\_\_\_\_\_\_\_\_.

**Short Answer Questions**

1. **Describe the process of viral reproduction**
2. **Explain how World War I contributed to the influenza pandemic of 1918**
3. **Distinguish between the work of Edward Jenner and that of Jonas Salk**
4. **Explain why it is important for virologists to study life forms in tropical rain forests.**
5. **Suggest how viruses may be used to cure genetic diseases?.**
6. **Discuss (name and describe) the two examples where disease was used as a weapon.**
7. **List some of the potential consequences of using a virus as a weapon.**