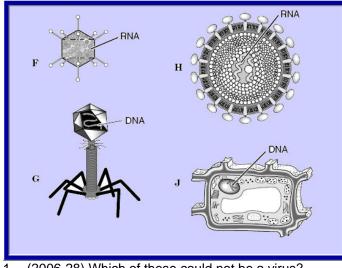
## **ANSWER SHEET**

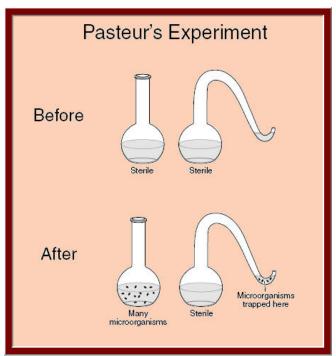
BIO SOL Review 12 - Disease - Viruses - Antibiotics (12)



- 1. (2006-28) Which of these could not be a virus?
  - a. F
  - b. G
  - c. H
  - d. J
- 2. (2006-26) Which of the following choices is not a method of preventing bacterial illnesses from spreading in a meat-processing plant?
  - a. Using antibiotics to treat persons with food poisoning
  - b. Washing hands and utensils with hot soapy water
  - c. Use of gloves when handling raw meat products
  - d. Treatment of work areas with chemical disinfectants
- 3. (2003-45) An important difference between viruses and living cells is that viruses
  - a. cannot reproduce outside of cells
  - b. cannot mutate but cells can
  - c. contain more nuclei than cells
  - d. need an energy source but cells do not
- 4. (2003-27) A certain virus causes a disease of the digestive system. What is the most likely source of this virus?
  - a. Soil
  - b. Water
  - c. Air
  - d. Insects
- 5. (2004-41) Which of these could be successfully treated with antibiotics?

## a. Strep throat

- b. Common cold
- c. HIV
- d. Influenza



- (2006-19) The results of Pasteur's experiment helped Pasteur to
  - a. isolate the virus responsible for smallpox
  - b. convince people to cover food
  - c. reject the theory of spontaneous generation
  - d. produce a vaccine against rabies
- (2002-44) People who have been exposed to excessive radiation often experience mutations. If these mutations only occur in somatic (body) cells, these people may
  - a. experience an increased risk of cancer
  - b. experience difficulties replicating RNA
  - c. pass on these mutations to their offspring
  - d. develop entirely new DNA sequences in all cells
- 8. (2002-41) Which characteristic do viruses possess in common with living cells?
  - a. They contain nucleic acids such as DNA or RNA.
  - b. They contain a nucleus and organelles.
  - c. They make their own food.
  - d. They are inactive outside the body of living cells.
- (2002-37) Tuberculosis is caused by a bacterium, Mycobacterium tuberculosis. Many years ago, streptomycin easily controlled the bacterium. Now streptomycin is much less effective against the resistant M. tuberculosis. The increasing resistance of M. tuberculosis to streptomycin is most likely due to the increased
  - a. use of streptomycin for bacterial infections
  - b. numbers of alternatives to streptomycin
  - c. artificial production of streptomycin
  - d. early detection of bacterial infections

- 10. (2002-5) Long ago, people thought that the smallpox virus could be carried through the air. For this reason, many people moved from crowded cities to the more open country during smallpox epidemics, carrying with them family members who had the virus but had not yet contracted the disease. When the pox erupted on these family members, other members living in the home soon contracted the disease too. Which of these was then discovered to be the means of transmission?
  - a. Being bitten by mosquitoes that carry the virus
  - b. Directly contacting a person with smallpox
  - c. Drinking water from local wells
  - d. Eating food that contains the virus
- 11. (2003-3) Animals coming from foreign countries are kept in quarantine before being allowed into the United States. This precaution is taken to help prevent
  - a. the escape of foreign animals into local natural habitats
  - b. the introduction of foreign animal diseases
  - c. cross-breeding of native animals with the foreign ones
  - d. predator destruction of the foreign animals
- 12. (2005-30) Change in species is described as a process that usually occurs over long periods of time. Yet, even though antibiotics have only been widely used for fifty years, scientists recognize that overuse of antibiotics has led to antibiotic-resistant strains of bacteria. The reason this can occur in a relatively short span of time is that
  - a. there are many different types of bacteria
  - b. bacteria are very small
  - c. travelers carry bacteria around the world
  - d. bacteria reproduce rapidly