

Ch 16 Ch Review

2. c

3. a

4. d

5. b

6. b

8. differences in DNA+RNA; differ DNA polymerase;
only bacteria have peptidoglycan

9. Transformation
Conjugation
Transduction

be able to explain each

11. Prokaryotes convert nitrogen gas to nitrogen compounds that plants can absorb from soil.

13. ① Invade + destroy cells

② Produce toxins - either secreted or w/in cell walls

14. Lytic cycle - uses host cell to reproduce

15. Good hygiene

16. To protect patients from getting a disease

17. * don't need to know

18. a. 560 b. 40,960 c. binary fission d. 32

19. a. Gram Staining

b. Purple - gram positive; extra thick cell walls w/ a lg amt of peptidoglycan

Pink - gram negative; less peptidoglycan + outer membrane

21. An individual who has been infected with cowpox virus has an increased resistance to smallpox.

22. Some bacteria invade + destroy cells + some secrete a poison. Viruses only replicate inside host cells, eventually killing the cells. Most bacterial infections can be treated with antibiotics, but viral infections are destroyed by the immune system OR prevented w/ a vaccine ahead of time.

23a. Most bacteria are helpful.

b. Viruses are not cells.

c. A cold is caused by a virus which is not treated by antibiotics.

d. Bacteria are not closely related - archaea are actually more similar to eukaryotes. (see Bozeman video on bacteria)