

1. The picture shows three different bacteria shapes. **Label** each shape.







Match the term with its definition.

Term	Definition
____ 2. lysogenic infection	A. Compound that block the growth and reproduction of bacteria
____ 3. prion	B. Protein coat surrounding a virus
____ 4. bacteriophage	C. Misfolded protein that causes disease in animals
____ 5. antibiotic	D. Bacteriophage DNA that is embedded in the host's DNA
____ 6. virus	E. Viruses with RNA as their genetic material
____ 7. prokaryote	F. Protective structure formed by a prokaryote when growth conditions are unfavorable
____ 8. prophage	G. Examples include SARS, MRSA, Ebola, and bird flu
____ 9. pathogen	H. Particle made of nucleic acid, protein, and in some cases, lipids; can replicate only by infecting living cells
____ 10. lytic infection	I. Process where viral DNA becomes part of a host cell's DNA
____ 11. endospore	J. Process by which some bacteria exchange genetic material
____ 12. binary fission	K. Preparation of weakened or killed pathogen or inactivated toxins used to produce immunity
____ 13. vaccine	L. Process in which a host cell bursts after a viral infection
____ 14. capsid	M. Organism consisting of one cell that lacks a nucleus
____ 15. retrovirus	N. Virus that infects bacteria
____ 16. conjugation	O. Process of cell division used by bacteria
____ 17. emerging diseases	

Importance of Bacteria - Use each of the following terms (once only) to complete the passage.

antibiotics
nitrogen
yogurt

bacteria
nitrogen fixation
decomposers

normal flora
disease
symbiotically

Most (18) _____ are beneficial. Some bacteria are (19) _____ that return vital nutrients to the environment. Certain types of bacteria use (20) _____ gas directly and convert this gas into compounds that plants can use. This process is called (21) _____. Some bacteria called (22) _____ live in and on the human body. *Escherichia coli* live (23) _____ in the gut of humans and produce vitamin K, which humans need for blood clotting. Many food products such as cheese and (24) _____, are made with the aid of bacteria. Other bacteria make (25) _____. A small percentage of bacteria cause (26) _____.

Importance of Viruses - Use each of the following terms (once only) to complete the passage.

cancer-causing
nucleus
DNA

retrovirus
host cell

reverse transcriptase
HIV
RNA

Some disease-causing viruses have (27) _____ instead of DNA. This type of virus is called a (28) _____. The best-known virus of this type is (29) _____. Some (30) _____ viruses belong to this group. In the core of the virus is RNA and an enzyme called (31) _____, which is the enzyme that transcribes (32) _____ from viral RNA. Then DNA moves into the (33) _____ of the cell, and the (34) _____ manufactures and assembles new HIV particles.

35. Complete the Venn diagram below. Insert at least two ideas per area.

