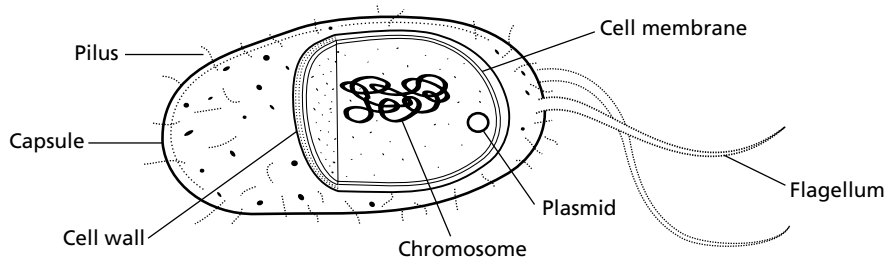




**SHORT ANSWER** Answer the questions in the space provided.

1. Where does photosynthesis take place in a photoautotrophic bacterium? \_\_\_\_\_  
\_\_\_\_\_
2. What is a glycocalyx, and what function does it serve? \_\_\_\_\_  
\_\_\_\_\_
3. Name three environmental factors that affect the growth of bacteria. \_\_\_\_\_  
\_\_\_\_\_
4. What type of genetic recombination in bacteria involves DNA transfer by viruses? \_\_\_\_\_  
\_\_\_\_\_
5. **Critical Thinking** Why are bacterial transformation, conjugation, and transduction not considered to be methods of reproduction? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**STRUCTURES AND FUNCTIONS** Briefly describe the function of each labeled structure in the drawing of a bacterial cell shown below.



1. Pilus \_\_\_\_\_
2. Capsule \_\_\_\_\_
3. Cell wall \_\_\_\_\_
4. Cell membrane \_\_\_\_\_
5. Chromosome \_\_\_\_\_
6. Plasmid \_\_\_\_\_
7. Flagellum \_\_\_\_\_