

Assessment

Quiz**Section: Cell Communication**

In the space provided, write the letter of the description that best matches each term.

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|---------------------------|---|
| _____ 1. signal | a. a substance formed of amino acids that binds with a specific molecule, causing the cell in which the substance is found to respond |
| _____ 2. receptor protein | |
| _____ 3. second messenger | b. a molecule that is generated when a specific substance attaches to a receptor on a cell membrane and that causes changes within the cell |
| | c. anything that carries information between cells |

In the space provided, write the letter of the response that best answers each question.

- _____ 4. What does a signaling cell do to aid communication among cells?
- It creates a receptor protein on its cell membrane.
 - It produces a molecule that a target cell can detect.
 - It sends a second messenger to neighboring cells.
 - All of the above
- _____ 5. How does a cell recognize only the signals meant for it?
- It has receptor proteins that respond to light and sound.
 - It has receptor proteins in the cytoplasm that respond to touch.
 - It has receptor proteins of specific shapes that certain molecules fit in.
 - It has receptor proteins that repel certain signal molecules.
- _____ 6. How might a cell membrane change in response to a signal?
- Transport proteins might open or close.
 - Transport proteins might be assembled in the cell membrane.
 - Transport proteins might leave the cell membrane.
 - Transport proteins might be converted to carrier proteins.
- _____ 7. How can a signal trigger a specific chemical reaction in a target cell?
- by bombarding the cell with a variety of messages
 - by detaching from a molecule in the cell membrane
 - by reducing the permeability of the cell membrane
 - by activating an enzyme in the cell membrane