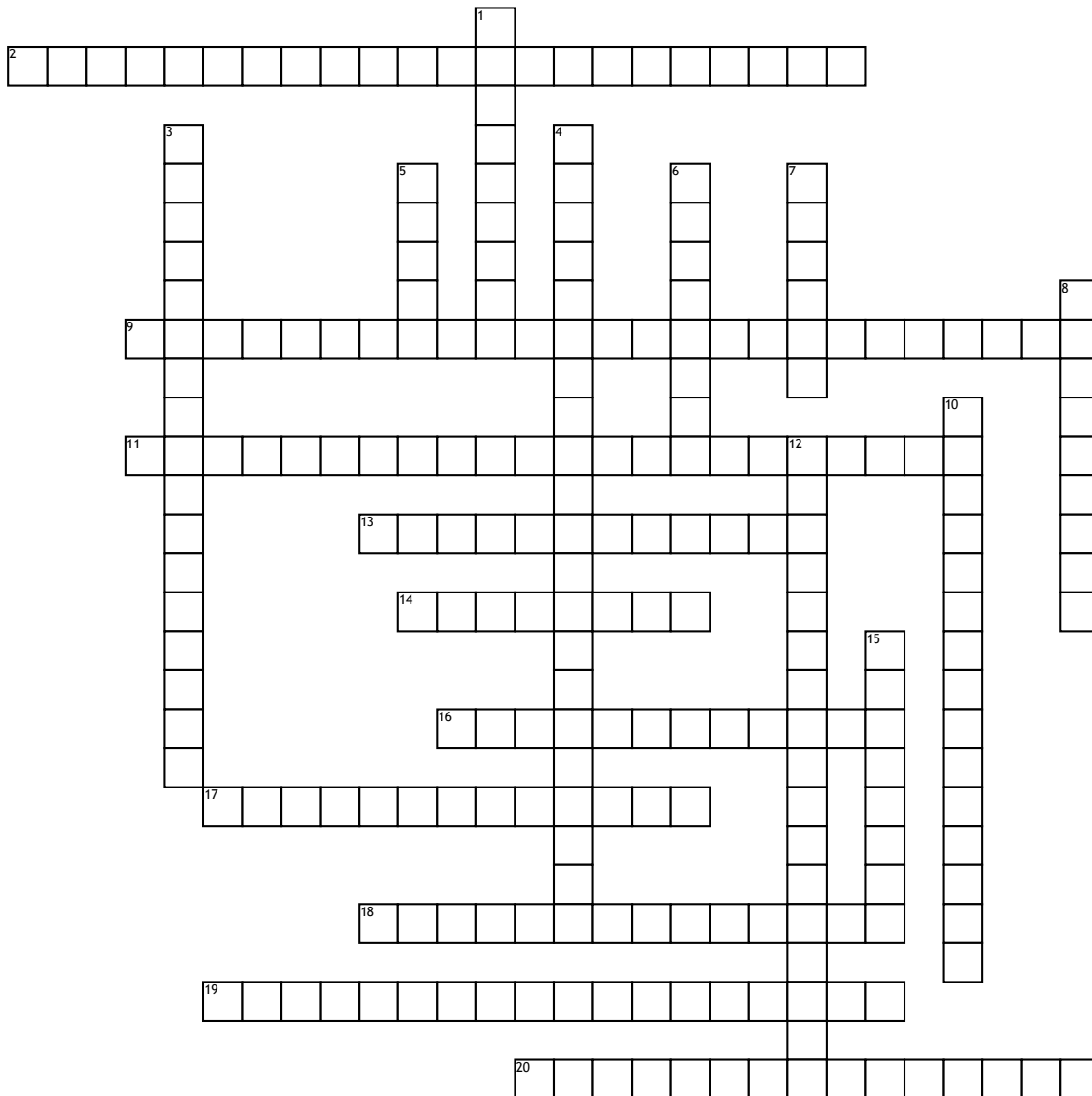


# Cell Communication



## Across

2. Signal receptor protein in the plasma membrane that responds to the binding of a signaling molecule by activating a G-Protein
9. process by which a signal on a cell's surface is converted to a specific cellular response is a series of steps.
11. a series of different molecules in a pathway are phosphorylated in turn, each molecule adding a phosphate group to the next one in line
13. the binding of the signaling molecule changes the receptor protein in some way, sending a cell response.
14. specialized cell that travels in the body fluids and act on specific target cells in other parts of the body to change their functioning.
16. spiral shape constituting one form of the secondary structure of proteins arising from a specific pattern of hydrogen bonding

17. an enzyme that transfers phosphate groups from an ATP to a protein, phosphorylating the protein

18. an enzyme that converts ATP to cAMP in response to a signal

19. secreted molecules acting on a neighboring cell

20. a secreted molecule that influences cells near where it is secreted

## Down

1. target cell's detection of a signaling molecule coming from outside the cell/target cell's detection of a signaling molecule coming from outside the cell

3. an enzyme that dephosphorylates proteins (opposite of protein kinase)

4. a protein pore in cell membranes that opens or closes in response to a ligand allowing or blocking the flow of specific ions

5. 2 receptor polypeptides dissociating closely with each other

6. GTP binding protein that relays signals from a plasma membrane signal receptor (G-Protein linked receptor) to other signal transduction proteins inside the cell.

7. a molecule that specifically binds to another molecule

8. cyclic adenosine monophosphate that is a common second messenger signaling molecule in eukaryotic cells and a regulator of some bacterial operons

10. small, non-protein, water-soluble molecule or ion that relays a signal to a cell's interior response to a signaling molecule bound by a signal receptor protein

12. junction where one neuron communicates with another cell across a narrow gap. Neurotransmitter molecules released by the neuron diffuse across the synapse relaying messages to other cells.

15. the triggered cellular response