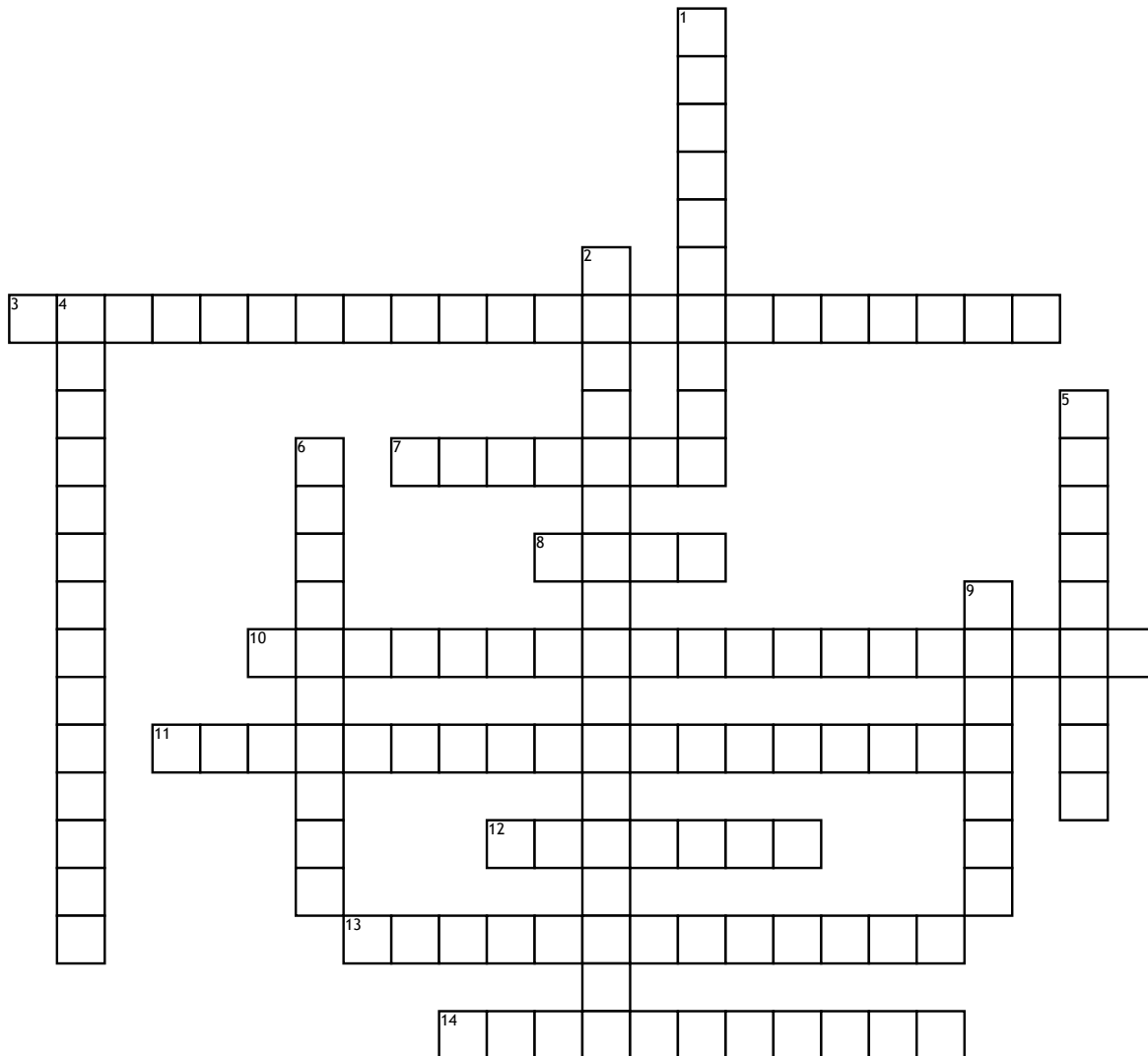


Cell Signaling



Across

3. Hormone binding to this receptor activates a certain protein by exchanging its GDP for GTP in order for it to activate an effector protein

7. Type of signaling in which signals travel through circulatory system of animals or vascular system of plants to reach receptors on distant cells

8. A protein within the brain that experiences increased levels of phosphorylation due to alcohol consumption

10. These receptors change the balance of ion concentrations, causing changes in electrical potential across the cell membrane

11. A small molecule that brings about later steps in a signal transduction pathway, amplifying and distributing the original signal

12. A protease triggered by external/internal signals to hydrolyze target proteins of nucleosomes, the cell membrane, and the nuclear envelope

13. Type of receptor where ligand binding that results in exposure of receptor active site on the cytoplasmic side of the cell allows for phosphorylating activity

14. Binding of this molecule leads to production of many molecules of cAMP that activate protein kinase A

Down

1. Type of signaling which requires direct contact between the signaling and responding cell

2. Type of signaling where signals are involved in local diffusion through synapses, followed by long distance electrical signaling

4. An enzyme within the cAMP/epinephrine pathway that activates/inhibits target proteins to trigger glucose release into bloodstream

5. Type of signaling in which signals affect cells that release them

6. Chemical signals an animal release to environment to provoke response from other individuals

9. Lipid soluble hormone that alters gene expression to activate increased transcription of actin and myosin