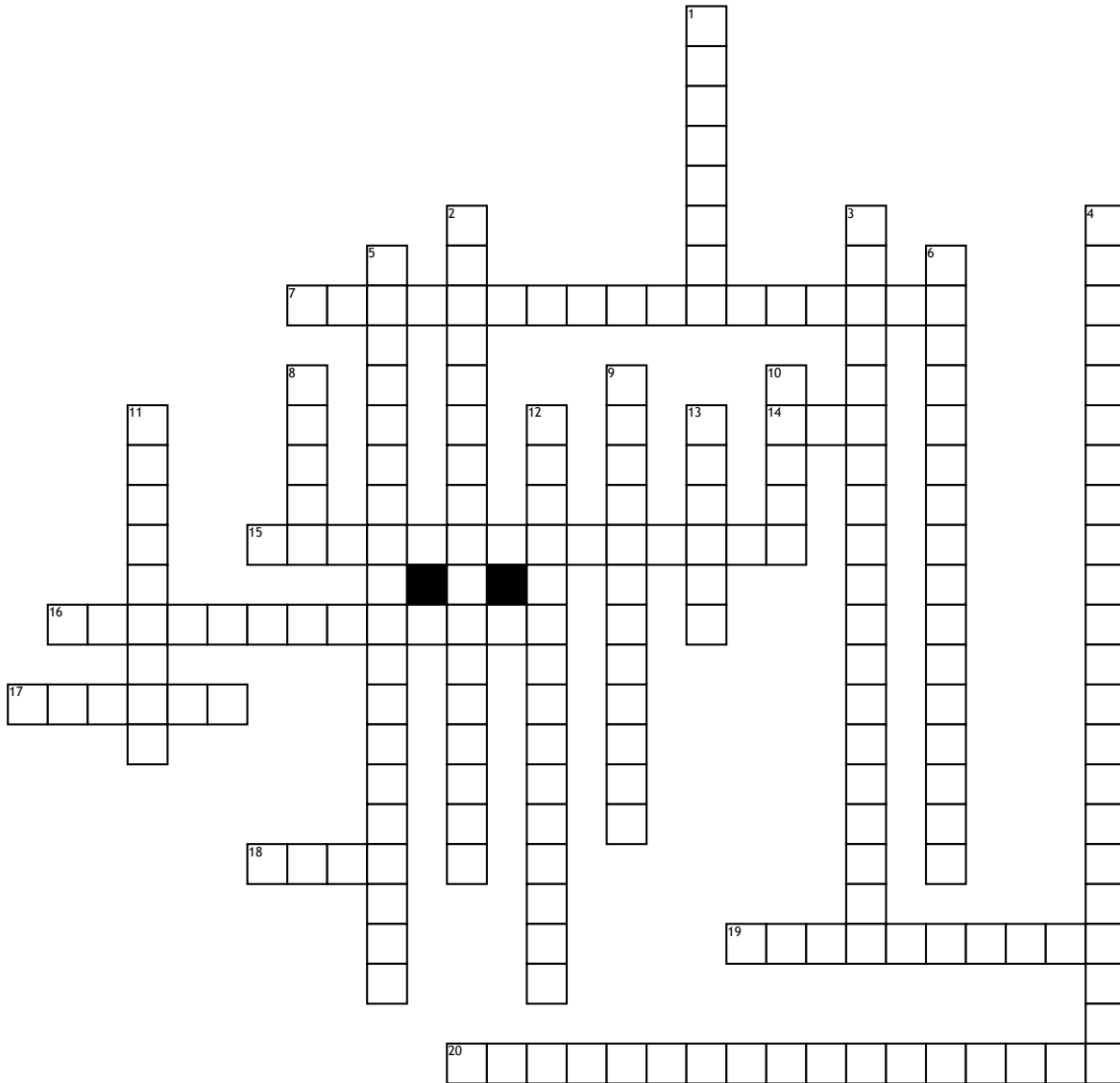


Name: _____

Nerve Transmission and Vertebrate Eye



Across

7. What is the full name of PDE?
14. Transducin activates this enzyme
15. What occurs when there is change in the membrane potential to a less negative value inside?
16. A very high degree of this results in rod cells to be able to respond to low intensities of light
17. What type of ions leak across the membrane when cGMP binds to ligand gated ion channels?
18. The PDE catalyses the hydrolysis of a ligand called...?
19. The activation of this G-protein results in the closure of the sodium ion channel

20. What initiates a response by binding to their receptors at a synapse?

Down

1. Inactivation of the sodium channels and the opening of the potassium channels _____ the resting membrane potential
2. What occurs due to a build-up of ions?
3. How does a photon of light change rhodopsin into photoexcited rhodopsin?
4. What are neurotransmitter receptors?
5. Protein used to actively pump excess ions in and out of the cell?

6. A state where there is no net flow of ions across the membrane

8. cGMP changes conformation and is removed from the channel, which causes the ion channel to...?
9. The two types of photoreceptor cells in the retina?
10. Different forms of this protein combining with retinal give different sensitivity to specific wavelengths of light in cone cells
11. The complex which consists of retinal and opsin
12. A wave of electrical excitation along a neurons plasma membrane
13. The area within the eye that detects light?