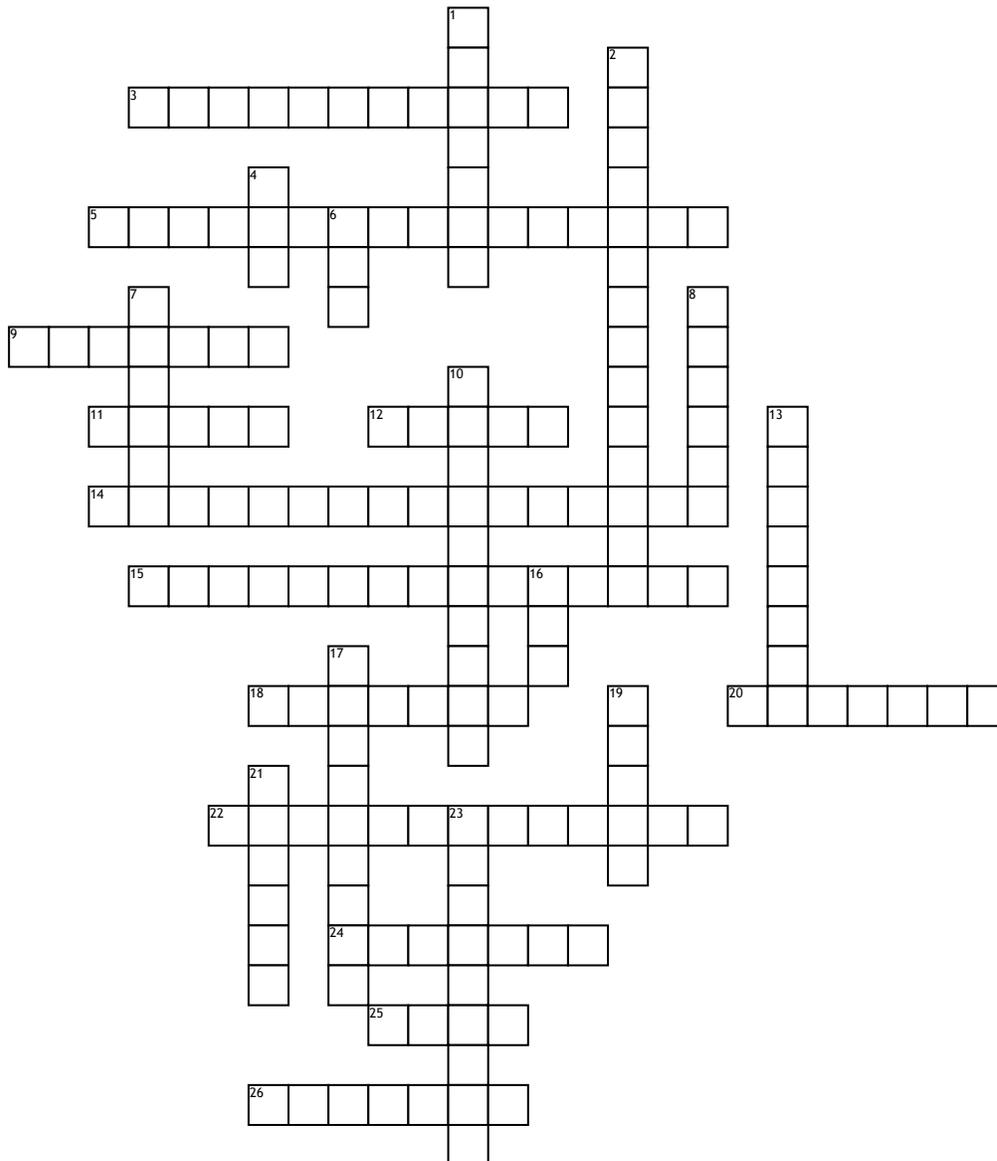


Advanced Higher Biology Unit 1



Across

3. Phase of cell cycle where the cytoplasm splits
 5. The pH at which a protein has no net charge
 9. Non-protein group which joins Opsin proteins to form rhodopsin
 11. Type of amino acid which is positively charged
 12. The tissue fluid from which growth factors are extracted from for a cell culture
 14. Signalling molecule released across the synapse
 15. A process where a charged molecule are separated by size, shape and charge as they move through an electric field applied to a gel matrix
 18. An example of a hydrophobic signalling molecules which bind to hormone response elements on DNA

20. Transports materials between membrane compartments

22. When the change of binding at one subunit of a protein alters the affinity of the remaining subunits.

24. When proteins are all given the same negative charge during electrophoresis and separated by size alone

25. The organelle from which Microtubules radiate

26. Globular protein which compose the hollow cylinders of microtubules

Down

1. A peptide hormone which triggers the recruitment of GLUT4 proteins to the plasma membrane of fat and muscle cells

2. Cell organelle where proteins undergo post-translational modifications

4. Type of chromatography which uses an absorbant layer of cellulose on top of glass, plastic or metal.

6. Protein which cyclins combine with to phosphorylate important proteins during the cell cycle

7. An enzyme which transfers a phosphate group to other proteins.

8. Used to control the pH of a solution

10. A non-protein group which is associated with a protein

13. The entire set of proteins than can be expressed by a genome

16. Photoreceptor cell in retina that functions at low light intensities

17. Phase of mitosis which has a checkpoint

19. Type of bond which forms between positively and negatively charged R groups

21. The molecule moved out of cells by the NA/K ATPase

23. Programmed cell death