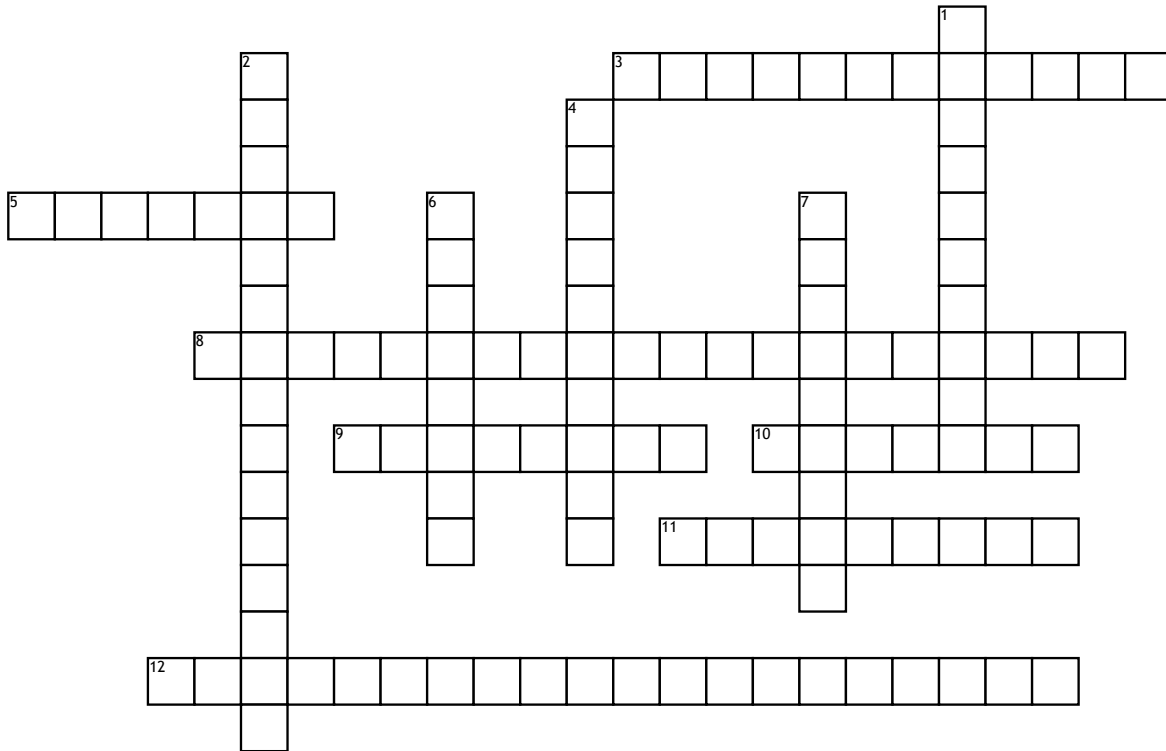


HSF S5- energy, membrane transport



Across

3. The head to tail arrangement of phospholipid molecules in the cell plasma membrane.

5. The movement of two different ions or molecules in the same direction across a plasma membrane, via a carrier/channel protein.

8. The movement of a solute (e.g. glucose) across a plasma membrane via the use of a carrier/channel protein. No ATP is used.

9. A solution that has the same total concentration of solutes (osmolarity) as intracellular fluid (fluid inside a cell). Approximately 290 mOsmol/L.

10. The movement (diffusion) of water across a selectively permeable membrane. Water will move from high concentration to low concentration.

11. A solution that has less solutes and more water molecules compared to intracellular fluid. <290 mOsmol/L.

12. Each specific cell has a plasma membrane which is structured to only let some substances pass through.

Down

1. The first stage of ATP synthesis. A series of chemical reactions occurring in the cytosol, which convert glucose into two pyruvic acid molecules, and two ATP molecules.

2. A series of chemical reactions occurring inside the mitochondria, which convert pyruvic acid into ATP and electron carrier molecules.

4. A solution that has more solutes and less water molecules compared to intracellular fluid. >290 mOsmol/L.

6. The movement of two different ions or molecules in the opposite direction across a plasma membrane, via a carrier/channel protein.

7. The movement of solutes (e.g. salt) from an area of high concentration to an area of low concentration. No ATP is used.