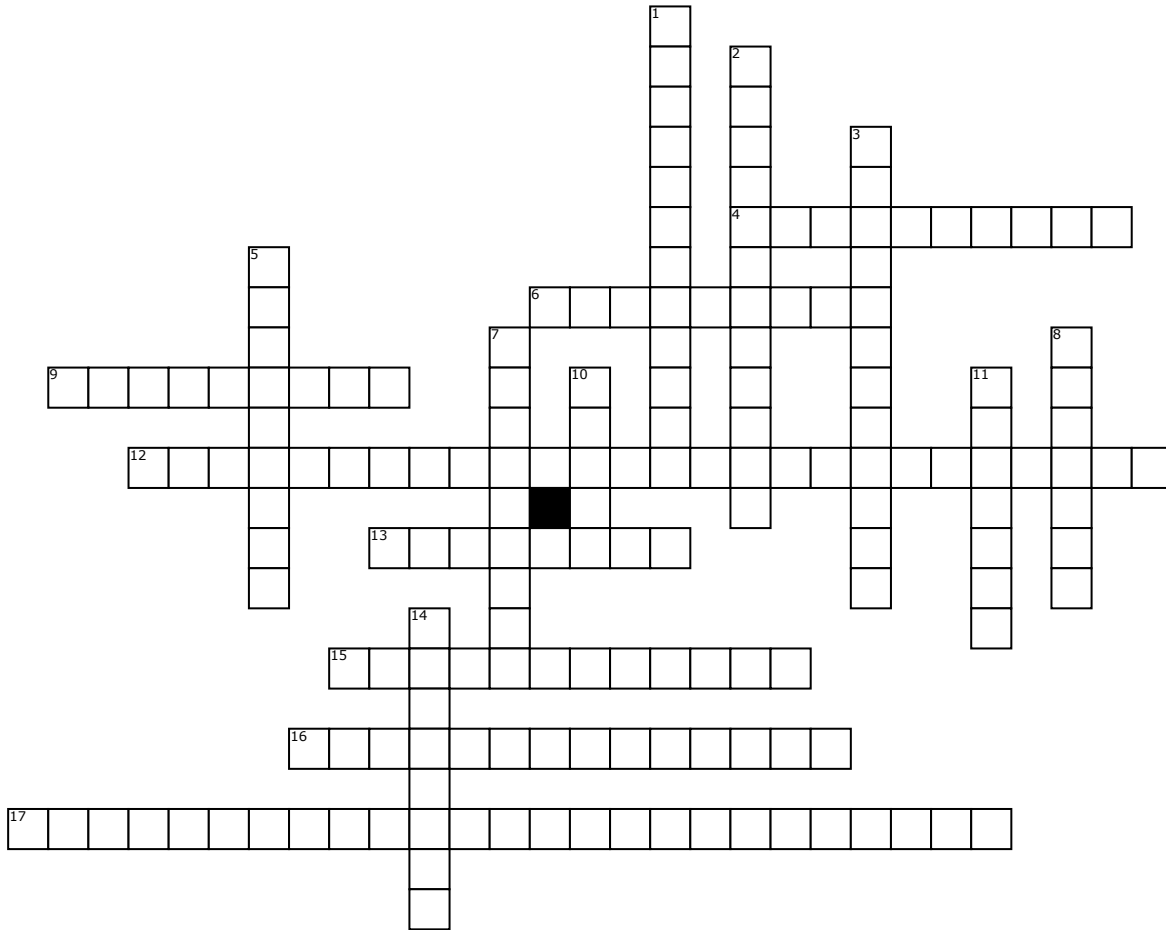


Organelle functions



Across

4. This aids animal cell division by helping in the formation of the fibres that separate chromosomes during mitosis (10)

6. This produces ribosomes (9)

9. These hold hydrolytic enzymes (speeds up hydrolysis) necessary for intracellular digestion (9)

12. Functions can include synthesis of steroids and lipids, calcium release in muscle cell contraction control and breakdown of lipid soluble toxins in liver cells (6,11,9)

13. Acts as a protective barrier and maintains the shape of a plant cell (4,4)

15. Controls what moves in and out of a cell, while acting as a protective barrier to the cells surroundings (4,8)

16. This is important in the packaging of macromolecules for transport to other areas of the cell (5,9)

17. This has ribosomes on its surface which synthesise proteins that collect in the ER for transport in the cell (5,11,9)

Down

1. These contain the cell's chlorophyll (12)

2. These release the energy cells need to divide, move, contract and produce secretory products (12)

3. This helps maintain the cell's shape and plays a role in locomotion, muscle fibre contraction and the internal movement of organelles (12)

5. The site of protein synthesis, where messenger RNA is moved along so amino acid molecules can be added to the protein chain by transfer RNA (9)

7. The substance that keeps organelles in their places, where most chemical reactions happen in the cell (9)

8. This stores the cell's genetic information as DNA and controls the activities within the cell (7)

10. These move liquid past or over the surface of a cell (5)

11. This plays a part in intracellular digestion and the cellular release of waste products, storing nutrients and waste products and regulating turgor pressure in the cell (7)

14. A tail-like structure which is used for cell movement (8)