

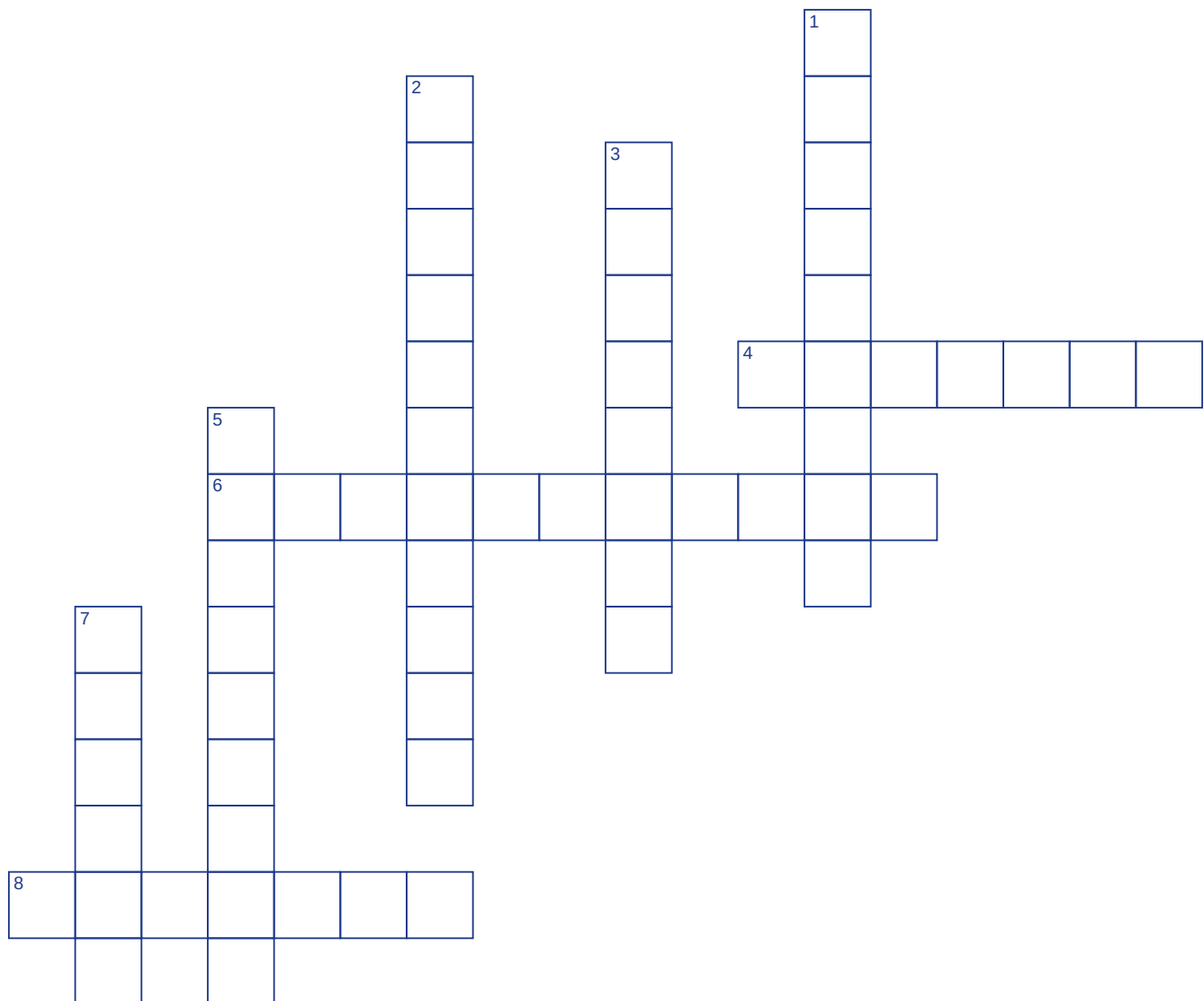
Cells and Systems Crossword

This puzzle reviews the vocabulary Grade 8 students need when they investigate the role of cells within living things ([Outcome](#)). It covers how substances move into and out of cells through diffusion and osmosis, how the cell membrane and other organelles carry out life functions, and how cells combine into tissue and organ systems ([Topic](#), [Outcome](#), [Outcome](#)). Some organelle terms, such as the nucleus and the chloroplast, are identified and described as part of cell structure studies([Outcome](#), [Outcome](#)). Respiration connects cell-level activity to the vital processes that keep whole organisms alive ([Details](#), [Outcome](#)).

How to play

- Read each clue. Its number matches a numbered square in the grid.
- Write one capital letter in each square. There are 3 words across and 5 words down.
- Crossing words share a letter, so check it fits both. The answer key shows the finished grid.

Puzzle grid



Clues

Across

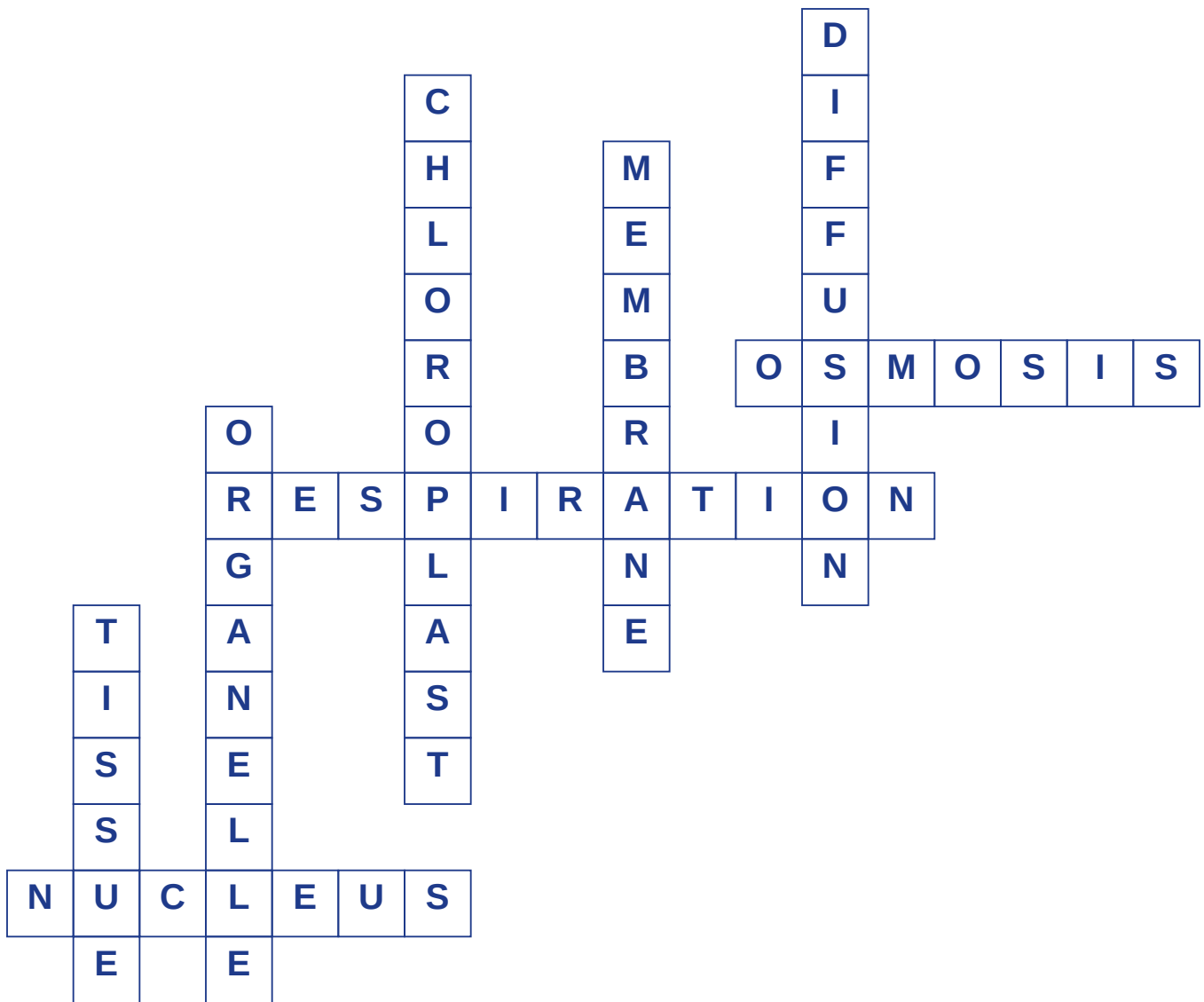
4. Movement of water across a cell membrane from high to low concentration. (7)
5. Process in cells that releases energy from glucose. (11)
6. Organelle that contains genetic material and controls cell activities. (7)

Down

1. Movement of particles from where they are concentrated to where they are less concentrated. (9)
2. Organelle in plant cells where photosynthesis captures energy from sunlight. (11)
3. Thin layer that surrounds a cell and controls what enters and exits. (8)
4. Tiny structure inside a cell that performs a specific function. (9)
5. Group of similar cells that work together to perform a function. (6)

Answer key

- **1 down:** DIFFUSION
- **2 down:** CHLOROPLAST
- **3 down:** MEMBRANE
- **4 across:** OSMOSIS
- **5 down:** ORGANELLE
- **6 across:** RESPIRATION
- **7 down:** TISSUE
- **8 across:** NUCLEUS



Note: 2 learning outcome blocks were left out to fit the 4000-token curriculum budget for this kind of material. Use "Split into parts" to generate one document per organizing idea.