

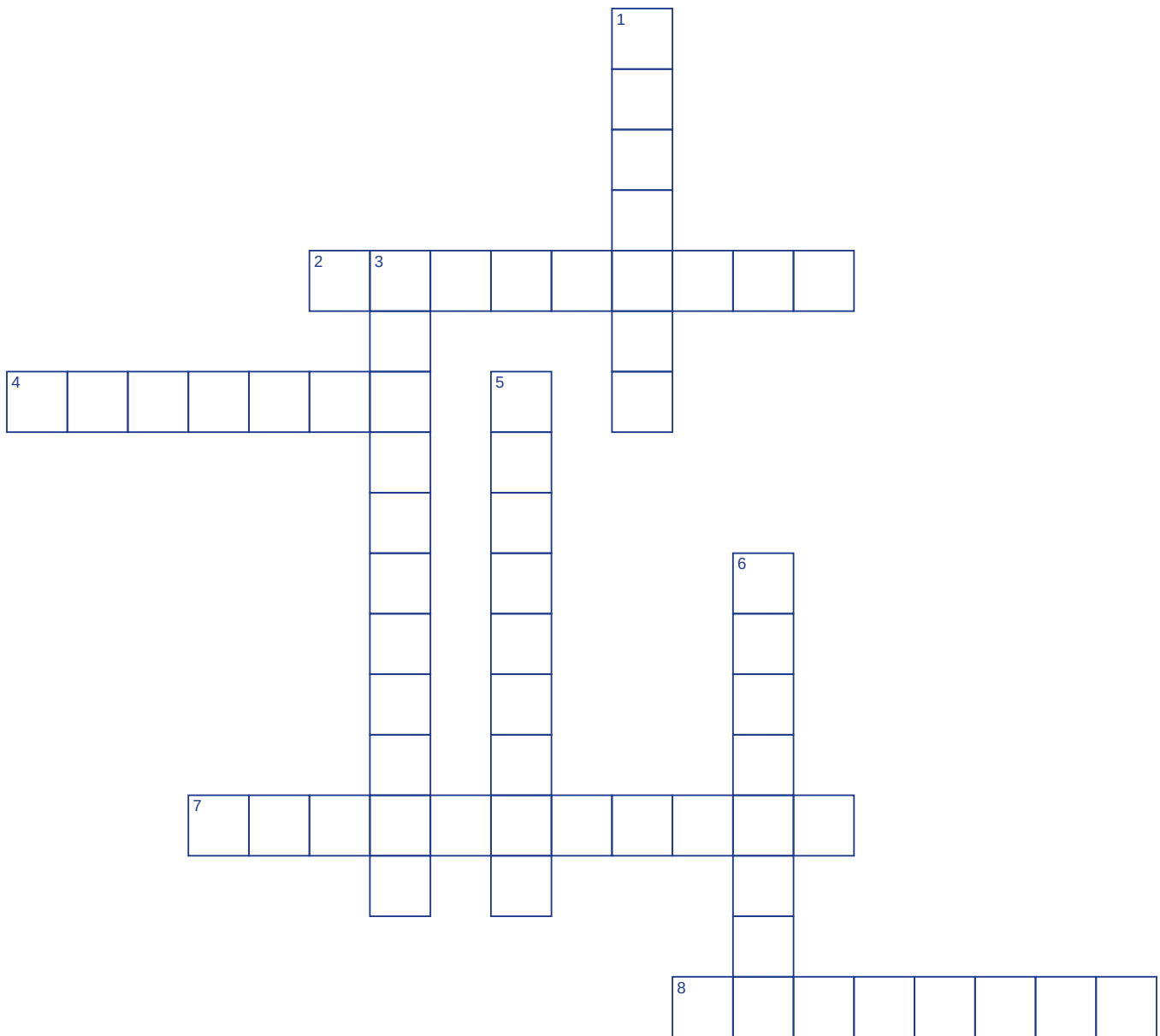
Cells and Systems Crossword

This puzzle reviews the vocabulary of Grade 8 Cells and Systems, where you investigate the role of cells as the basic unit of life and compare how plant and animal cells are built and function ([Outcome](#)). Every organism, whether single-celled or made of trillions of cells, relies on structures such as the nucleus, ribosome, chloroplast, and membrane to carry out the processes that keep it alive, and on movement mechanisms like diffusion and osmosis to exchange gases and liquids ([Outcome](#)). These ideas connect to the broader concept that living things function as systems built from cells, tissues, and organs working together ([Topic](#), [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 4 words across and 4 words down.
- Crossing words share a letter, so check it fits both. The answer key shows the finished grid.

Puzzle grid



Clues

Across

2. Tiny structure inside a cell that performs a specific job. (9)
3. Movement of water across a cell membrane due to concentration differences. (7)
4. Plant cell structure where photosynthesis captures energy from sunlight. (11)
5. Thin layer that surrounds a cell and controls what enters and exits. (8)

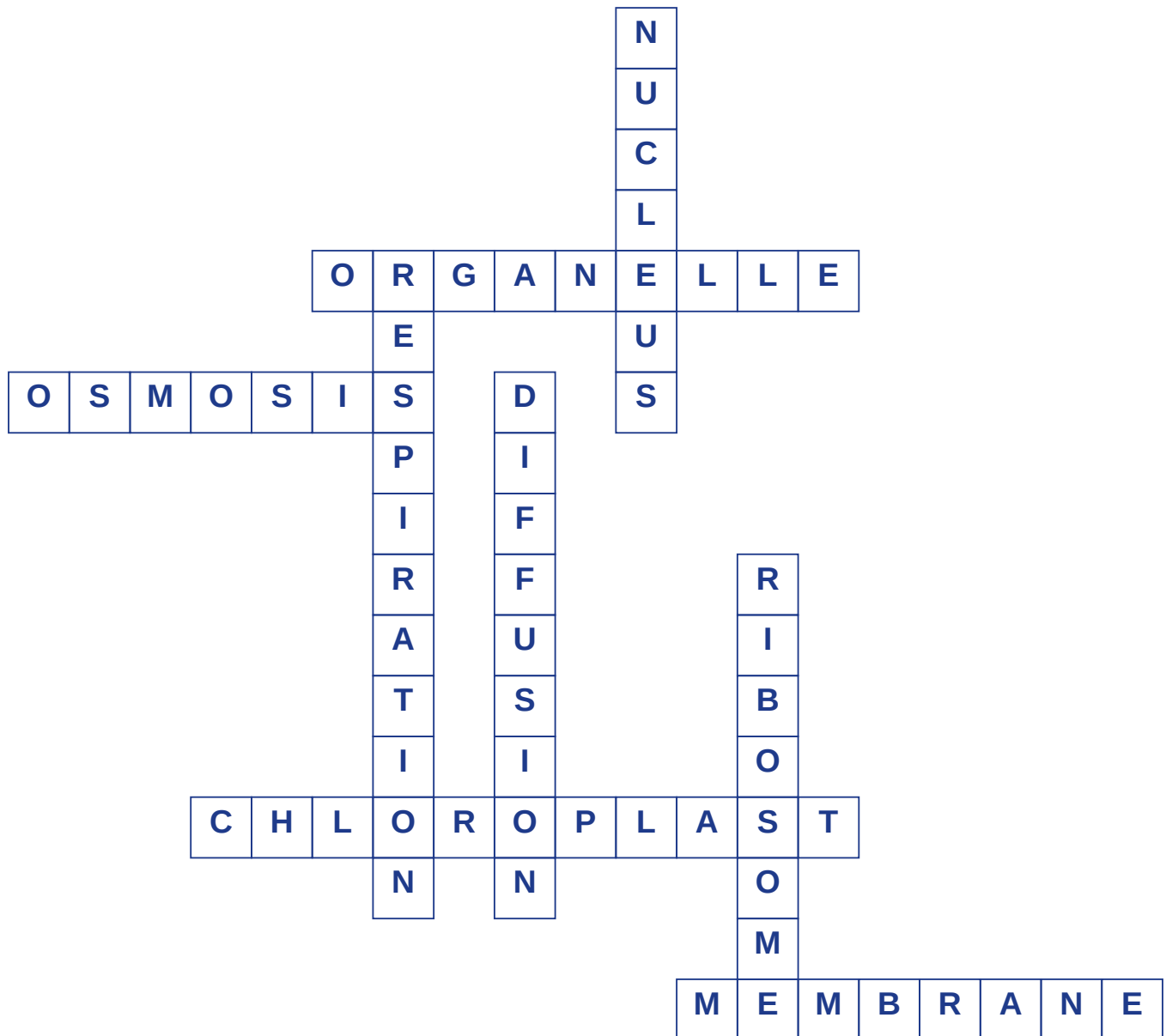
Down

1. Cell part that contains genetic material and controls cell activities. (7)
2. Process in cells that releases energy from glucose. (11)
3. Movement of particles from an area of high concentration to low concentration. (9)

4. Cell structure where proteins are made. (8)

Answer key

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



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.

