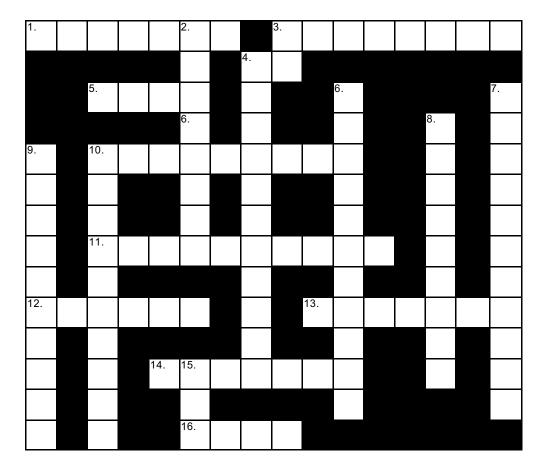
## Crossword Puzzle: Membrane Transport



## ACROSS

- **1.** Movement of water through a semi-permeable membrane toward the hypertonic side.
- **3.** Border of cell; barrier to free movement of molecules in and out of the cell.
- 4. Nickname for Edward
- **5.** A cell, hypertonic on the inside, may eventually burst a process called \_\_\_\_\_lysis.
- 10. The opposite of *10 down*
- 11. The process of moving things out of the cell.
- **12.** This type of transport requires ATP or energy.
- **13.** Both facilitated diffusion and pumps make use of \_\_\_\_\_\_ proteins to move things across the membrane.
- 14. Transport with no energy required. Opposite of *12 across*.
- **16.** This type of carrier protein requires energy to transport molecules across the membrane.

## DOWN

- **2.** At the same concentration; neither hypotonic nor hypertonic.
- 3. Doctor's degree
- 4. The process of moving things into the cell.
- 6. The process known as \_\_\_\_\_ diffusion uses a carrier protein but requires no energy.
- Diffusion continues until the molecules have spread out to an even concentration throughout a given space. This is called a state of \_\_\_\_\_\_.
- **8.** Process where molecules move from an area of higher concentration to an area of lower concentration.
- **9.** A membrane protein that allows *charged molecules* to move through it. (2 words)
- 10. An area of high concentration is said to be this.
- **15.** The energy molecule of the cell.