

## Active Transport Quiz

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Class: \_\_\_\_\_

**1. What is the difference between active and passive transport?**

- a. Active transport requires energy; passive transport does not.
- b. Active transport moves molecules across cell membranes; passive transport does not.
- c. Active transport involves oxygen and water molecules; passive transport does not.
- d. Active transport occurs only in nerve cells; passive transport occurs in all the body's cells.

**2. The cell membrane is semi-permeable. What does "permeable" mean?**

- a. Extremely thick
- b. Extremely thin
- c. Able to be penetrated
- d. Able to be broken

**3. The natural spreading of particles through a liquid or gas is called:**

- a. Dilution
- b. Diffusion
- c. Differentiation
- d. Fusion

**4. What does it mean when substances move "down a concentration gradient?" Choose the best answer.**

- a. They move from areas where there are few particles to areas where there are lots of particles
- b. They move from areas with lots of water to areas where there is little water
- c. They move from one side of a cell membrane to the other
- d. They move from areas where there are a lot of particles to areas where there are few particles

**5. If you were looking for transport proteins, where would you find them?**


- a. Inside a cell's nucleus.
- b. Lodged within a cell's membrane.
- c. Inside a cell's cytoplasm.
- d. Inside a cell's endoplasmic reticulum.

**6. How do transport proteins move substances across membranes?**


- a. They move inside the membrane, carrying the substance
- b. They change shape
- c. They rip open a temporary hole in the membrane
- d. They increase the concentration gradient inside the cell

**7. What might happen if a cell did not have any ATP?**

- a. It would not have enough energy to carry out active transport
- b. Its transport proteins would be made of carbohydrates instead
- c. Its cell membrane would no longer be semi-permeable
- d. Its concentration gradient would be steeper

**8.  What can you infer about the membrane of a vesicle or vacuole?**

- a. It is made out of transport proteins
- b. It is made out of water molecules
- c. It's made out of the same substance as the cell membrane
- d. It's made out of cellulose

**9.  What is the main function of white blood cells?**

- a. To fight germs
- b. To absorb substances into cells
- c. To supply cells with energy
- d. To even out concentration gradients

**10. What process releases substances from a cell?**

- a. Hypocytosis
- b. Endocytosis
- c. Mesocytosis
- d. Exocytosis