

NAME:

PERIOD:

DATE:

Cell Transport Classwork 1

For each question:

- name the substance that is moving (you might have to infer)
- tell if the cell used energy to transport the substance or not
- name how the cell is transporting the substance: endocytosis, exocytosis, or diffusion
 - if you chose diffusion, also tell if it is osmosis

#0 is done for you as an example.

0. A bacterial cell is living happily in the grass, decomposing (eating) an apple core.

Particles of the apple are moving into the cell.

The cell will use energy to bring them in.

This is endocytosis.

1. After three days of no rain, the summer sun begins to dry out the bacteria. (It's losing water.)

2. A muscle cell in your arm is getting low on glucose. The muscle cell opens up its cell membrane and lets the large molecule of glucose inside itself.

3. Love potion is dripped into your milk. The love potion particles mix with the milk in seconds.



4. After a hard test, one of your brain cells has built up a large clump of waste products. It opens its cell membrane and lets out the waste particle.

5. After a not so hard test, one of your brain cells had built up many, many tiny particles of waste products. The waste particles are crowded in the cell, so they flow out on their own.



MORE CHALLENGING – ATTEMPT AT YOUR OWN RISK!

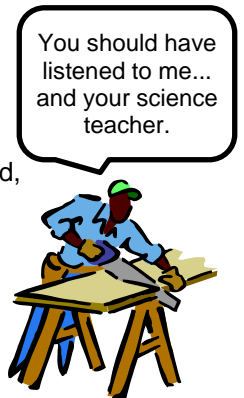
6. You slice up some celery sticks. They are fresh and juicy and you can't wait to eat them. You set them on a dry paper towel. When you come back later, the celery sticks are not crunchy and the paper towel is all wet. (HINT: The cells are in the celery.)

What happened to the celery?



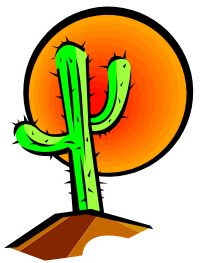
7. You build a brand new wooden deck on your house. You think you know everything about decks, so you don't put deck sealer on it even though the carpenter told you to. After several weeks of summer rain and sun and rain and sun, the boards of your deck are cracked, warped, and ruined. (HINT: The cells are in the wood.)

What happened to the deck?



8. A cactus has an adaptation of a thick waxy outer coating called a cuticle. Water is repelled by wax.

How does this help the cactus?



9. You cut up a stalk of celery. (What is it with you and celery anyway?) You put the stalk into a glass of red Kool-Aid. After a day of sitting in the red Kool-Aid, the celery stalk and the leaves at the top look red!

How did the red food coloring get up to the top of the dead celery stalk?

