Cell Transport Situations

Directions—In the spaces provided, completely explain each situation from **a transport perspective** and include the **appropriate terms** as much as possible.

1. Briefly explain how oxygen gas moves from our lungs to our blood (you can use the same logic to explain why CO_2 moves out of our blood into our lungs immediately before we exhale).

2. Briefly explain why dry skin is more of a problem in the winter than in the summer.

3. Briefly explain why applying lotion to our skin helps to prevent dry skin.

4. Why do our eyes tend to dry out when we are swimming?

5. A couple takes their vacation to a warm tropical location, why might it be a good idea to take off their wedding rings before swimming in the ocean.

6. Explain why gargling with salt water can help to heal a sore throat.

7. Briefly explain what would happen to a freshwater plant if placed in a salt water aquarium. Be specific in your explanation from a transport perspective.

8. Predict what would happen to cells in our eyes if we used distilled water as wetting solution for contact lenses.

9. Predict what would happen to a chicken egg that does not have its shell when it is placed in syrup.

10. Why does glucose tend to move into cells after we eat a meal?

11. Observe the graph below and label the ranges of [sugar] where the solution is:
    1. Hypotonic to the potato cores
    2. Hypertonic to the potato cores
    3. Isotonic to the potato cores

12. Discuss two mechanisms by which large particles move across a membrane.