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## Cell Membrane Study Sheet

 In 1665, \_\_\_\_\_\_\_, an English scientist observed that cork was composed of small units which he called states that living things are composed of cells. 3. A \_\_\_\_\_\_ is a hypothesis that scientific investigations have shown to be true most of the time. 4. A \_\_\_\_\_\_ is a hypothesis that scientific investigations have shown to be true all of the time. 5. Many organisms such as \_\_\_\_\_, \_\_\_\_, some \_\_\_\_\_, and \_\_\_\_\_ are composed of only a single cell. Single celled organisms are described as being \_\_\_\_\_\_. Organisms which are composed of many cells are described as being \_\_\_\_\_\_. 8. All cells live in a \_\_\_\_\_ environment. The human body is about \_\_\_\_\_% water. The \_\_\_\_\_\_ allows materials to come into or out of a cell. 11. \_\_\_\_\_ means that the membrane only allows certain things to pass into or out of a cell. Cell membranes are composed of \_\_\_\_ layers of molecules called \_\_\_\_\_. The phospholipid cell membrane is composed of atoms called a \_\_\_\_\_ group and \_\_\_\_\_ (fats) such as \_\_\_\_\_. 14. The outside parts of the phospholipid bilayer are described as being \_\_\_\_\_\_ (water loving) and the inside parts are described as being \_\_\_\_\_ (water fearing). 15. Are you hydrophobic or hydrophilic? is the universal solvent. 17. Because the outside and inside of the phospholipid bilayer attracts water, things can dissolve to join. with the membrane to enter or leave the cell. 18. Embedded in the cell membrane are \_\_\_\_\_. 19. Some proteins are bonded together to form \_\_\_\_\_\_ through which certain things can pass into or out of the cell. 20. A \_\_\_\_\_ is a work of art composed of bits and pieces of things inlaid into some uniform surface. The model of the cell membrane is often described as being a \_\_\_\_\_\_. 22. \_\_\_\_\_\_ is the random movement of particles resulting in their movement from a region of greater concentration to one of lesser concentration. Oxygen enters a cell and carbon dioxide leaves a cell by way of \_\_\_\_\_\_. 24. \_\_\_\_\_\_ is the diffusion of water through a semipermeable membrane.