

**Essential Question: How does the cell transport materials across the cell membrane to maintain homeostasis?**

Use the information in the video and your Diffusion and Osmosis handouts to answer the following questions.

Crash Course Biology – Membranes and Transport (11 min)

<http://youtu.be/dPKvHrD1eS4>

Crash Course Biology – Biological Molecules (review of macromolecules) (14 min) Phospholipids (minute 10 to 10:30)

<http://youtu.be/H8WJ2KENIK0>

1. What does it mean to be “selectively permeable?” \_\_\_\_\_
  
2. What are the two categories of movement across the membrane? \_\_\_\_\_  
\_\_\_\_\_
  
3. Which one of these two types of movement does not use energy? \_\_\_\_\_
  
4. The process by which molecules/particles move from a more crowded area to a less crowded area \_\_\_\_\_
  
5. The diffusion of water across a membrane \_\_\_\_\_
  
6. When the concentration of solution is higher when compared to another solution \_\_\_\_\_
  
7. When the concentration of a solution is lower when compared to another solution \_\_\_\_\_
  
8. When two solutions have the same concentration \_\_\_\_\_
  
9. The type of molecule that makes up the double layer of the cell membrane \_\_\_\_\_
  
10. Means “water-loving” \_\_\_\_\_
  
11. Means “water-fearing” \_\_\_\_\_
  
12. Embedded in the cell membrane and helps substances move across the membrane \_\_\_\_\_
  
13. Important chemical that provides energy for cells to do work (like active transport) \_\_\_\_\_
  
14. An important example of active transport \_\_\_\_\_
  
15. The type of transport using vesicles that moves material OUTSIDE of the cell \_\_\_\_\_
  
16. The type of transport using vesicles that moves material INSIDE the cell \_\_\_\_\_