**Unit 2: Cell Structures and Processes Review**

Need Extra help with reviewing? Go here for more resources: **tinyurl.com/sphsbiounit2review**

1.Compare and contrast the types of cells



2. What two organelles are thought to be a result of endosymbiosis?

3. Define Endosymbiosis

4. What features are shared by all types of cells?

|  |  |  |  |
| --- | --- | --- | --- |
| Letter | Name | Function | What type of biomolecule(s) |
| **A** |  |  |  |
| **B** |  |  |  |
| **C** |  |  |  |
| **D** |  |  |  |
| **E** |  |  |  |
| **F** |  |  |  |
| **G** |  |  |  |

5. Label the parts of the cell membrane

**

 *Explain what has happened in the diagram to the left.*

1. Why did the large dark molecules NOT move to the left?
2. How is the semi-permeable membrane like a cell membrane?
3. If the dark molecule is starch, where is the starch concentration greatest (left or right)?
4. If the white molecule is water, where is the water concentration greatest in the first picture?
5. In osmosis, water moves from an area of concentration of stuff to an area of concentration of
. stuff(higher/lower)
6. If the dark molecules(in the diagram) could move, in what direction would they move? Why?
7. In diffusion, molecules move from an area of to an area of concentration. (higher/lower)
8. Which way **wate**r will move in each of the following situations:
	1. Salt inside the cell 65% and outside the cell 40%.
	2. Sugar inside the cell 27% and outside 80%.
9. What is **homeostasis**?
10. How does the cell membrane help maintain homeostasis?

## 21. Comparison of active and passive transport

|  |  |  |
| --- | --- | --- |
|  | **PASSIVE TRANPORT** | **ACTIVE TRANSPORT** |
| **Requires energy?** |  |  |
| **Low to high concentration or****high to low concentration?** |  |  |
| **Examples****A****B** |  |  |

1. Label the diagram to the left (A and B) as Endocytosis and Exocytosis
2. Give an example and a purpose for both A and B

**B**

1. Label the processes as Active or Passive. What does this mean for the cell?