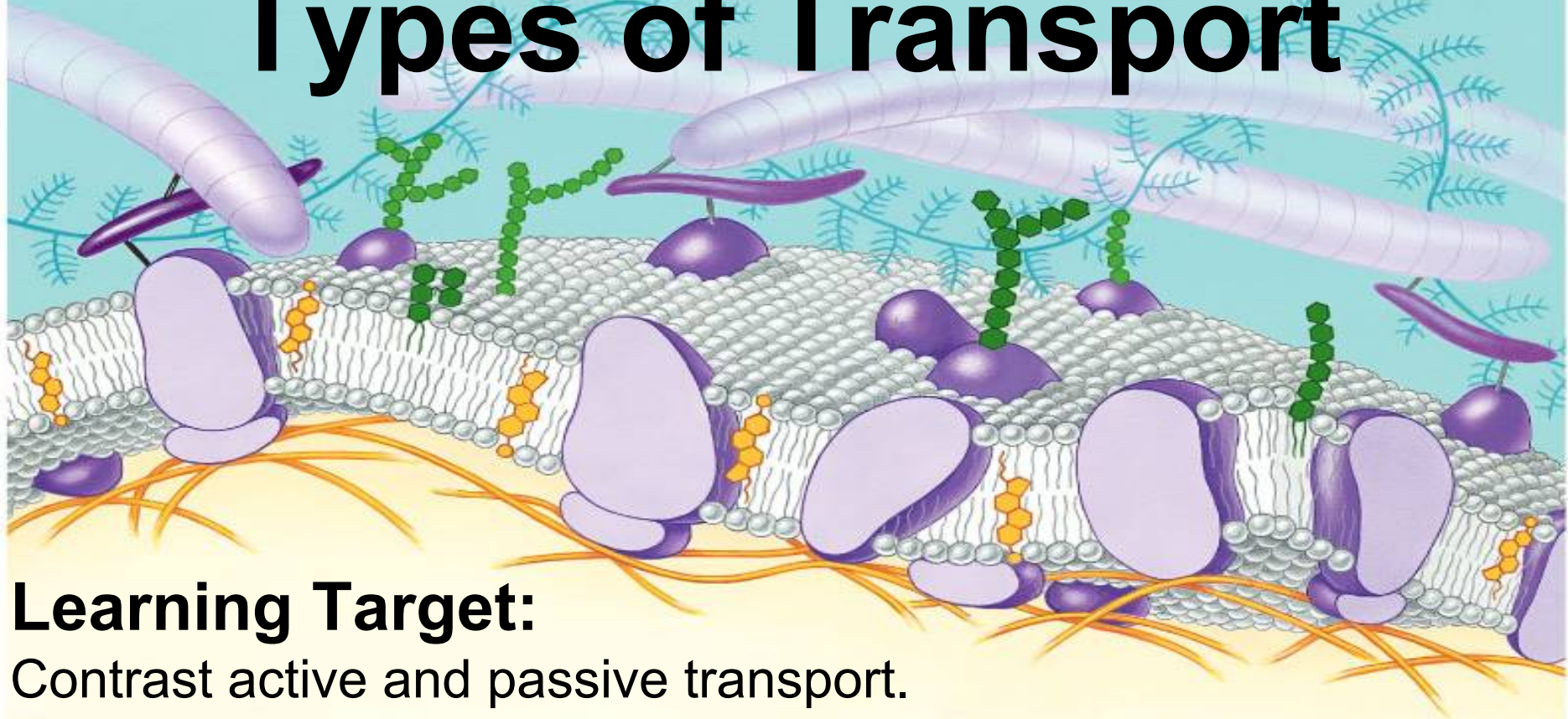


Types of Transport

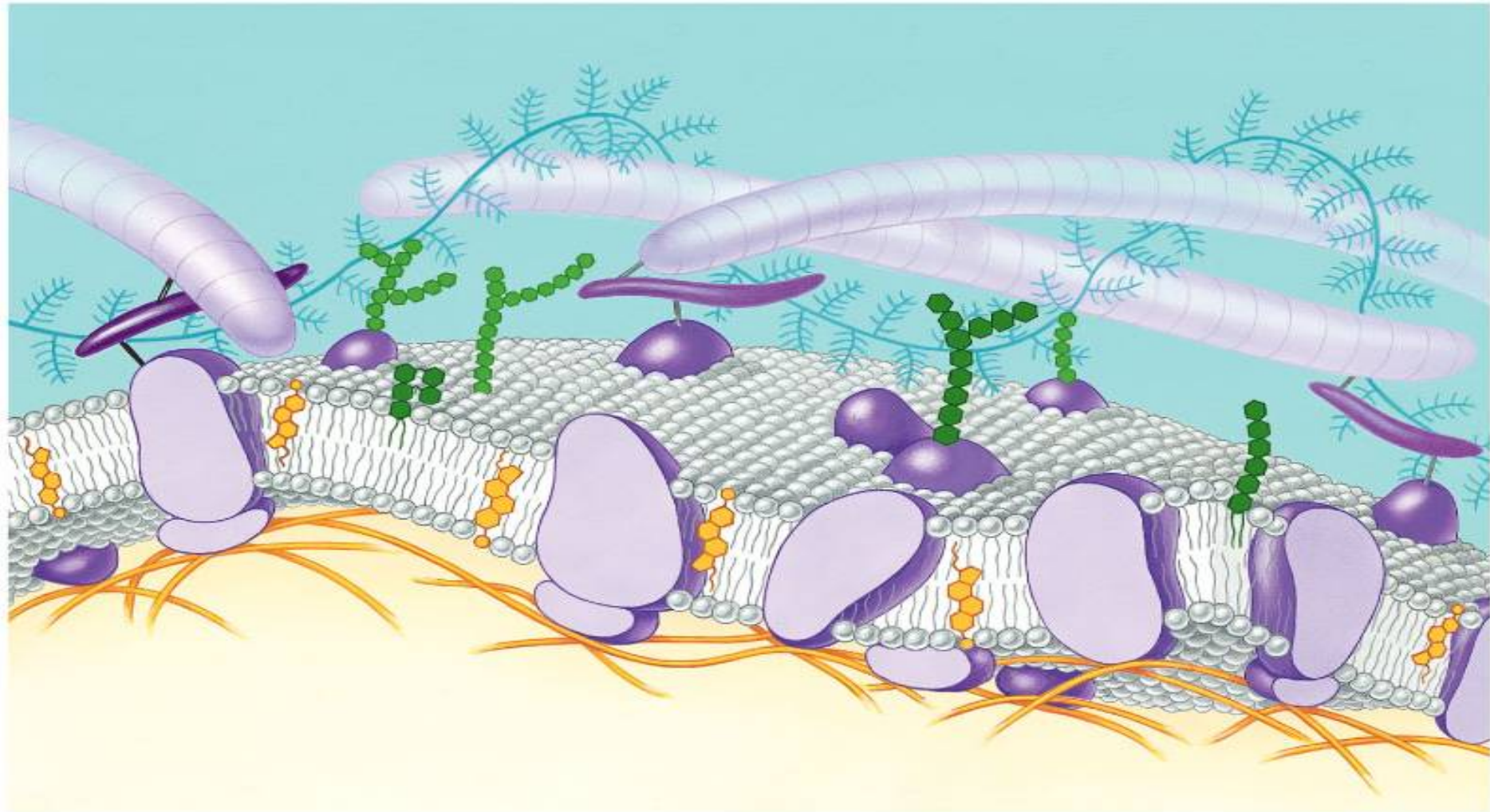


Learning Target:

Contrast active and passive transport.



Recall: What is the structure of the plasma membrane and what are some of its characteristics?



What are the characteristics of the plasma membrane?

1. **Fluid Mosaic Model:** describes how the parts of the membrane are not stuck in place, but have the ability to move around.

What are the characteristics of the plasma membrane?

2. **Semi-permeable:** describes a membrane that only allows **SOME** molecules to pass.

YES

- Small molecules
- Non-polar molecules

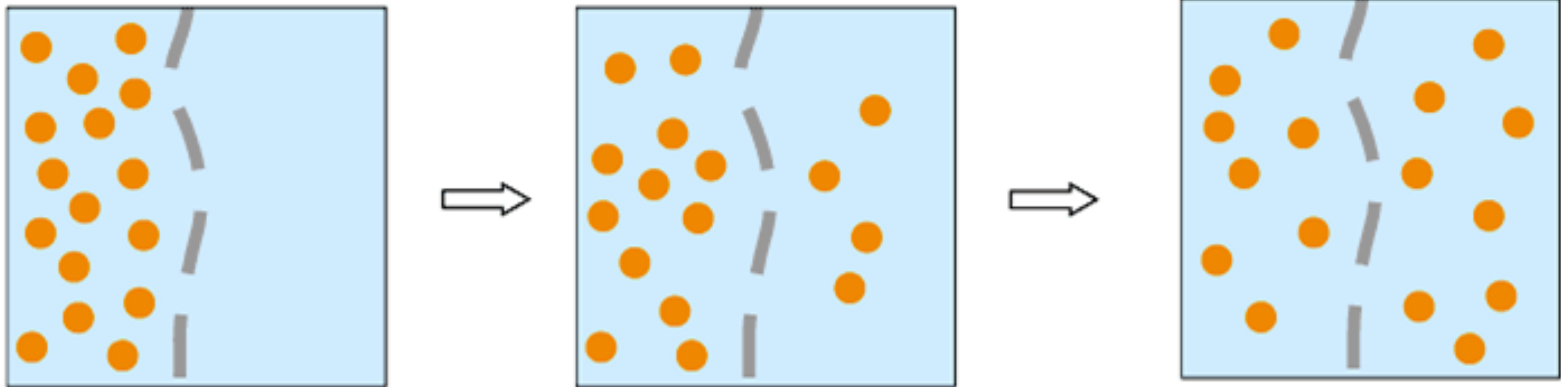
NO

- Large molecules
- Polar molecules
- Ions

Important Vocabulary

Concentration Gradient: When the amount of substances (concentration) is different in two places.

Equilibrium: When the amount of substances (concentration) is the SAME in both places.



What is passive transport?

- Describes the transport of molecules across the plasma membrane.
- Molecules are in constant, random motion.
 - Move from high concentration to low concentration.
 - Occurs naturally, so it does NOT require energy.
- Diffusion, osmosis, or facilitated diffusion.

What is active transport?

- Requires energy.
- Molecules move from a region of low concentration to high concentration.
- This does not occur naturally, so the cell has to use energy (ATP).

