Lesson 3

Cells: Standard 3: Cell Membrane and Transport

Agenda

1. Warm-up:
2. Notes
3. BrainPop
4. Textbook Practice
5. Gummy Bear Lab

Warm-up

HW: Finish Transport Text Practice

1. Write down your homework. (We will come around and check)

2. In your warm-up document, write and answer the question:

Why could you smell the vanilla outside of the balloon?

Transport within the Cell Membrane: Purple

Passive Transport
- cell uses no energy to move particles
- moves through pores in the cell membrane
- moves from high concentration to low concentration until reaching dynamic equilibrium

Diffusion

- moves molecule

How it helps the cell:
- oxygen, carbon dioxide
- salts

Osmosis

- moves water

How it helps the cell:
- moves water

Active Transport
- cell uses energy to move particles
- moves through special gates in the cell membrane
- moves from low concentration to high concentration

Endocytosis

- moves larger molecules into the cell

How it helps the cell:
- foods (glucose)

Exocytosis

- moves larger molecules out of the cell

How it helps the cell:
- wastes

Brainpop

Textbook Practice

if not finished in class, then homework

Gummy Bear Lab

1. Open your Gummy Bear Lab

2. Wait for materials, then measure your gummy bear and record the measurements in the AFTER data table

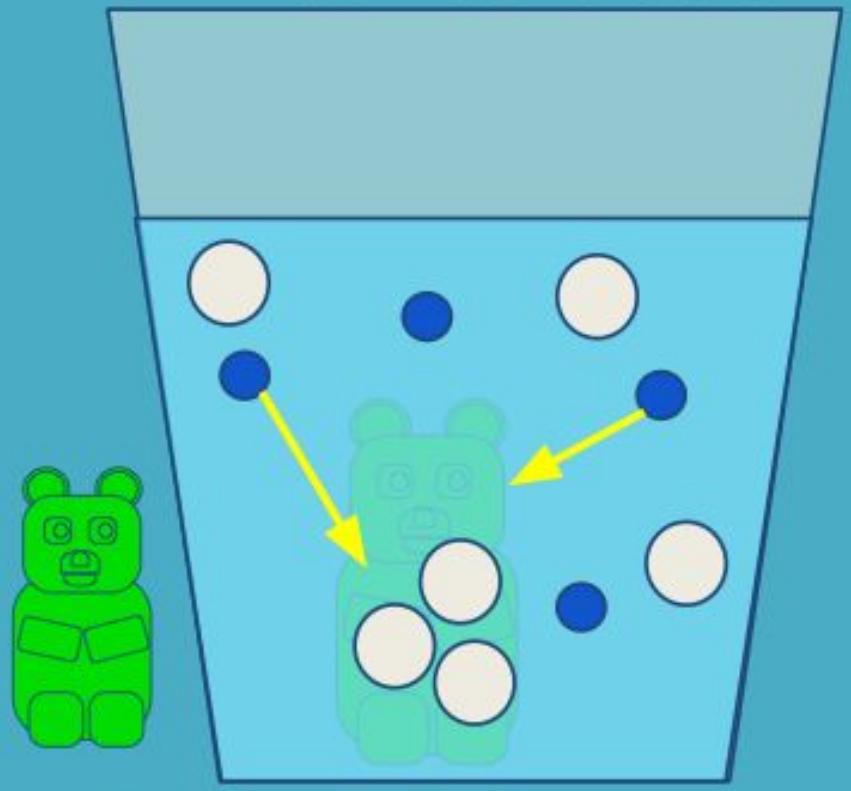
3. Paper towel/gummies: Trash
   Cup: rinse-->recycle
   spoon: rinse---> tray

Osmosis

Sugar Molecule

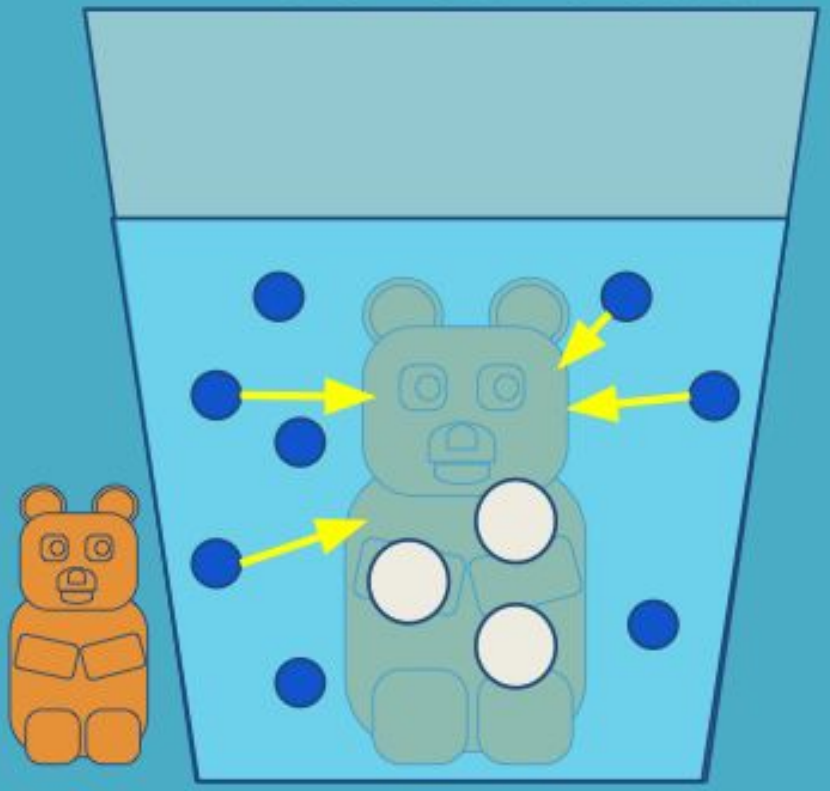
Water Molecule

High Sugar Concentration



- Sugar is at equilibrium
- Water osmoses to reach equilibrium
- Fewer water molecules to osmose

Low Sugar Concentration



- Sugar molecules too large to diffuse out of the gummy bear
- Water osmoses to reach equilibrium
- More water molecules to osmose