1. What is an organelle? Small organs structure inside a cell

Organelle known as the powerhouse <u>Mitochondria</u>

3. Organelle known as cell stomach <u>Lysosomes</u>

4. Organelle known as cell brain Nucleus

5. Organelle present in prokaryote cells Ribisomes

6. Organelle present in animal and plant cells

a. <u>Mitochondria</u> e. <u>Cell membrane</u>

b. Nucleus f. Nucleolus

c. <u>Ribosomes</u> g. <u>Smooth endoplasmic Reticulum</u>

d. RER h. Vacuoles

e. <u>Golgi body</u> i. <u>Cytoplasm</u>

7. Organelle present only in plant cells **Chloroplast** and **Cell Wall**

8. Organelle present in animal cells only **Centriole and Lysosomes**

9. What are the three scientists that develop the cell theory?

a. Theodore Schawn

b. Mathias Scheiden

c. Rudolph Virchow

10. What are two other names for the cell membrane?

a. Plasma membrane

b. Phospholipid bilayer

11. What does the word cell means? Small box or room like

- 12. What is the function of the cell membrane? Controls what enter or leaves

 the cells
- 13. What is a solution? It's a mixture of a solvent and a solute
- 14. What is diffusion? Motion of particle through a semi-permiable membrane from high concentration to low concentration
- 15. What is osmosis? Motion of water through a semi-permiable membrane from high concentration to low concentration
- 16. What is the consequence to a cell in a hypertonic cell? Cell shrinks
- 17. What is the consequence to a cell in a hypotonic cell? Cell swells_
- 18. What is the consequence to a cell in a isotonic cell? Cell stays the same
- 19. What is active transport? Motion of substances through a semi-permiable membrane from low concentration to high concentration and requires energy ATP.
- 20. What is passive transport? Motion of subtances through a semi-permiable membrane from high concentration to low concentration, no energy requied No ATP.
- 21. Mention two types of endocytosis Phagocytosis and Pinosytosis
- 22. Mention the difference between pinocytosis and phagocytosis

Phagocytosis cell engolfs or eats

23. What is a concentration gradient? high concentration to low concentration

- 24. Define the following prefix:
 - a. Endo Inside
 - **b.** Exo **outside**
 - c. Hypo <u>less</u>
 - d. Hyper More
 - e. Iso equal
 - f. Phago eat
 - g. Pino drink
 - h. Cytos cell
 - i. Semi allow some things through

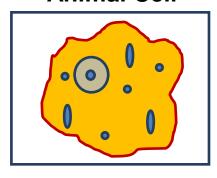
j.

- 25. Ocean water (<u>hypertonic</u>, hypotonic, isotonic)
- 26. Distill Water (hypertonic, hypotonic, isotonic)
- 27. Red blood cells (hypertonic, hypotonic, isotonic)
- 28. Why animal cells don't have cell wall? animals can move and are more flexible than plants.
- 29. Why plant cell have large vacuole? They need a lot of water
- 30. Which cell is bigger prokaryote or eukaryote? **eukaryote**
- 31. Why the plasma membrane is considered a semi-permeable membrane?

Selects what can pass or go through the membrane

- 32. Mention three component present in the cell membrane
 - a. Phosphates
 - b. Proteins
 - c. Lipids

Draw the following Animal Cell

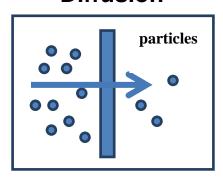


VS

Plant Cell

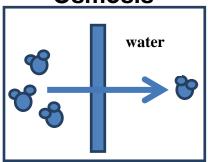


Diffusion

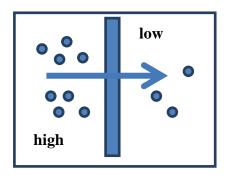


VS

<u>Osmosis</u>

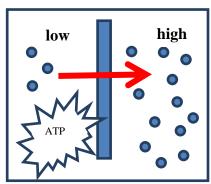


Passive Transport

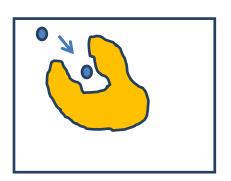


VS

Active Transport



Endocytosis



VS

Exocytosis

