

Ch. 3-2 Notes Guide “ Moving Cellular Material”

ATP:

1. All cells must obtain and use _____ for _____.
2. What does ATP stand for? _____. It is also known as _____.
3. List the two steps in which cells get energy:
 - 1)
 - 2)
4. Which organelle in the cell is responsible for the production ATP? _____

Cell Membrane:

5. The cell membrane is made of 2 layers of _____ called the lipid _____.
6. How does the cell membrane carry out similar functions to that of a window screen?
7. A cell’s membrane is “_____”.
8. Materials that are _____ in lipids _____ easily.
9. List three factors that help determine the way particles move “in and out” of the cell?
 - a)
 - b)
 - c)
10. _____ molecules move through easily.
Name some examples : _____
11. Molecules larger than water such as _____ “DO NOT” move through the cell membrane on their own.

Types of Transport across the cell Membrane:

(Passive Transport):

12. The movement of substances “into and out of” the cell membrane “without using energy” is called _____.
13. What are three ways the cell can move material without energy?
 - a)
 - b)
 - c)

14. **“Simple diffusion”** moves materials from _____ to _____ concentration. (For example, _____ and _____ diffuses into the cell, while _____ diffuses out of the cell).
15. **Diffusion** is a _____ process which means no energy is used to make the molecules move, they have a natural _____.
16. **Osmosis** is the diffusion of “_____” across a cell membrane.
17. **Facilitated diffusion** _____ require energy. It uses _____ to move material from high to low concentration.

(Active Transport):

18. **Active transport** requires energy (or _____). It moves materials from _____ to _____ areas of concentration. It goes _____ the concentration gradient.
19. Large molecules move materials _____ the cell by a process called _____. It takes in _____ molecules as a vesicle. This is sometimes called “_____”.
20. Large molecules are _____ of the cell by vesicles that fuse together with the cell membrane through a process called _____.
21. **Exocytosis** is how many _____ are secreted and how _____ communicate with one another.

****Below Draw an illustration of a **vesicle** undergoing “Endocytosis” and “EXocytosis” across a cell membrane (In ColorPlease!!!)

Endocytosis

Exocytosis

| | |
|--|--|
| | |
|--|--|

3.2 Notes Guide (B)“ Moving Cellular Material”

ATP:

1. All cells must obtain and use _____ for _____.
2. What does ATP stand for? _____. It is also known as _____.
3. Which organelle in the cell is responsible for the production ATP? _____

Cell Membrane:

4. How does the cell membrane carry out similar functions to that of a window screen?
- 5 A cell's membrane is “_____”.
6. Materials that are _____ in lipids _____ easily.
7. _____ molecules move through easily.
Name some examples : _____
8. Molecules larger than water such as _____ “DO NOT” move through the cell membrane on their own.

Types of Transport across the cell Membrane:

9. ‘Simple diffusion’ moves materials from _____ to _____ concentration. (For example, _____ and _____ diffuses into the cell, while _____ diffuses out of the cell).
10. Diffusion is a _____ process which means no energy is used to make the molecules move, they have a natural _____.
11. Osmosis is the diffusion of “_____” across a cell membrane.