

## Cell Organelles - Who Am I?

Compare the parts of a cell to the parts of your body. You have a brain, a heart, lungs, and skin—each organ in your body has a job to do! Just like your body, cells have organelles that do different jobs within the cell.

FOR EACH PARAGRAPH → Read and mark the text, then fill in the name of the organelle, appearance, and job that it does in the cell. The first one is done for you.

**BOLD - the name of the organelle**

UNDERLINE - appearance, location

**BOLD AND UNDERLINE - job it does in cell**

### Organelle 1

“I am called the ‘powerhouse’ of the cell. As a mitochondria, I am responsible for producing the cell’s energy. Mitochondria digest the cell’s “food” and turn it into power for the cell. I am the chief conductor of cellular respiration. You can find me and my many brothers and sisters in the cytoplasm.”

<b>Organelle</b>	
<u>Appearance/location</u>	
<b><u>Function</u></b>	

### Organelle 2

“I work hard to build material for the cell. My job is to connect amino acids together to make long chains of protein. As a ribosome, you might find me floating in the cytoplasm or as a small bump on the side of the rough endoplasmic reticulum.”

<b>Organelle</b>	
<u>Appearance/location</u>	
<b><u>Function</u></b>	

### Organelle 3

“I am the packaging center. I box up proteins and put ions in storage. As the endoplasmic reticulum, I have two different parts— rough and smooth. My rough parts are responsible for packaging proteins. The ribosomes on my sides make me rough. My smooth parts are the smooth tubes that store spare ions and other chemicals the cell might need later. You can find me near the nucleus and throughout the cytoplasm.”

<b>Organelle</b>	
<u>Appearance/location</u>	
<u>Function</u>	

#### Organelle 4

“I look like a pancake folded over and over. As a Golgi apparatus, I work with the endoplasmic reticulum to package molecules. I combine simple molecules to make larger molecules and store them in vesicles, or small pockets. In my spare time, I create lysosomes.”

<b>Organelle</b>	
<u>Appearance/location</u>	
<u>Function</u>	

#### Organelle 5

“I am always hungry. That is because I am a tiny vesicle called a lysosome that is full of enzymes. I use my enzymes to break down food into nutrients. I float around in the cytoplasm waiting for food to digest.”

<b>Organelle</b>	
<u>Appearance/location</u>	
<u>Function</u>	

#### Organelle 6

“I am the cell’s storage area. As a vacuole, I am a bubble-like container for storing food, water, or even waste. In a plant cell, I am very large, but in an animal cell, I am smaller and I hang out with my many siblings.”

<b>Organelle</b>	
<u>Appearance/location</u>	
<u>Function</u>	

### ANSWER THESE FINAL QUESTIONS

1. Why are organelles essential to the life of a cell?	
2. In what ways do the organelles work together?	
3. In what ways do they work separately? Cite examples from the text of each.	
4. What can you infer about the location of most cell organelles?	