**Cell Definition Cards**

*Explore*

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| **Mitochondria**  A cell part that breaks down food molecules (sugar) into the kind of energy that can be used by the cell to function. | **Nucleus**  A cell part that has all the instructions for the cell’s functioning and decides what proteins are made by the cell to be shipped outside the cell. |
| **Cell Membrane**  A cell part that holds in all other cell parts and has door-like openings to allow only *certain* materials (like sugars and proteins) to be let in and out of the cell. | **Sugar**  A food molecule that comes into the cell to be converted into energy the cell can use for functioning. |
|  | **Proteins**  Products made by the cell to help the whole body survive and function properly. |

**Cell Analogy**

*Explore*

A factory’s job is to create a specific product, so each type of factory creates a different kind of product. Each worker and machine in the factory does a specific and different job. However, all the machines and workers work together to make sure the factory functions properly.

The power generators create all the energy that the factory needs. In order to make the kind of energy that is used by the factory, the power generators need fuel. The fuel is delivered from outside the factory and comes in through the Receiving Department, where a Receiving Worker decides what materials can enter the factory.

The factory control center decides what product the factory will make and gives instructions on how it will make it. Once the products are made, they are shipped out of the factory through a door in the Shipping Department, which is monitored by the Shipment Worker.