# **Organelle Table Activity Answer Key**

1. Use what you know from The Cell Cycle book as well as the Inside a Living Cell section of the Cell Article to complete the Organelle Table below.
2. For each organelle, determine whether it is found in animal or plant cells (or both!) as well as its major functions.

Challenge: Find another organelle described in the article and add it to your table!

**Organelle Table**

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| --- | --- | --- |
| **Organelle Name** | **Plant or Animal Cell** | **Organelle Functions** |
| Cell Membrane | Both | * A thin layer that encloses the cell * Separates the inside of a cell from the outside environment * Only lets some substances into the cell |
| Cell Wall | Plant Cells | * A stiff covering found outside a cell membrane * Can help protect the cell or anchor it to other cells |
| Chloroplast | Plant Cells | * The “food factory” in a plant cell with similar functions as the mitochondria * Includes chlorophyll which is involved in photosynthesis |
| Chromosome | Both | * Contains DNA and genes * Determines cell structures’ characteristics * Found in the nucleus |
| Cytoplasm | Both | * All the material enclosed within a cell membrane that holds the cell’s organelles |
| Mitochondria | Both | * Considered the “power plants” of a cell * Convert food into energy the cell can use to grow, divide, and do its work |
| Nucleus | Both | * The “control center” of a cell * Directs activities within the cell * Contains chromosomes and nucleoli |