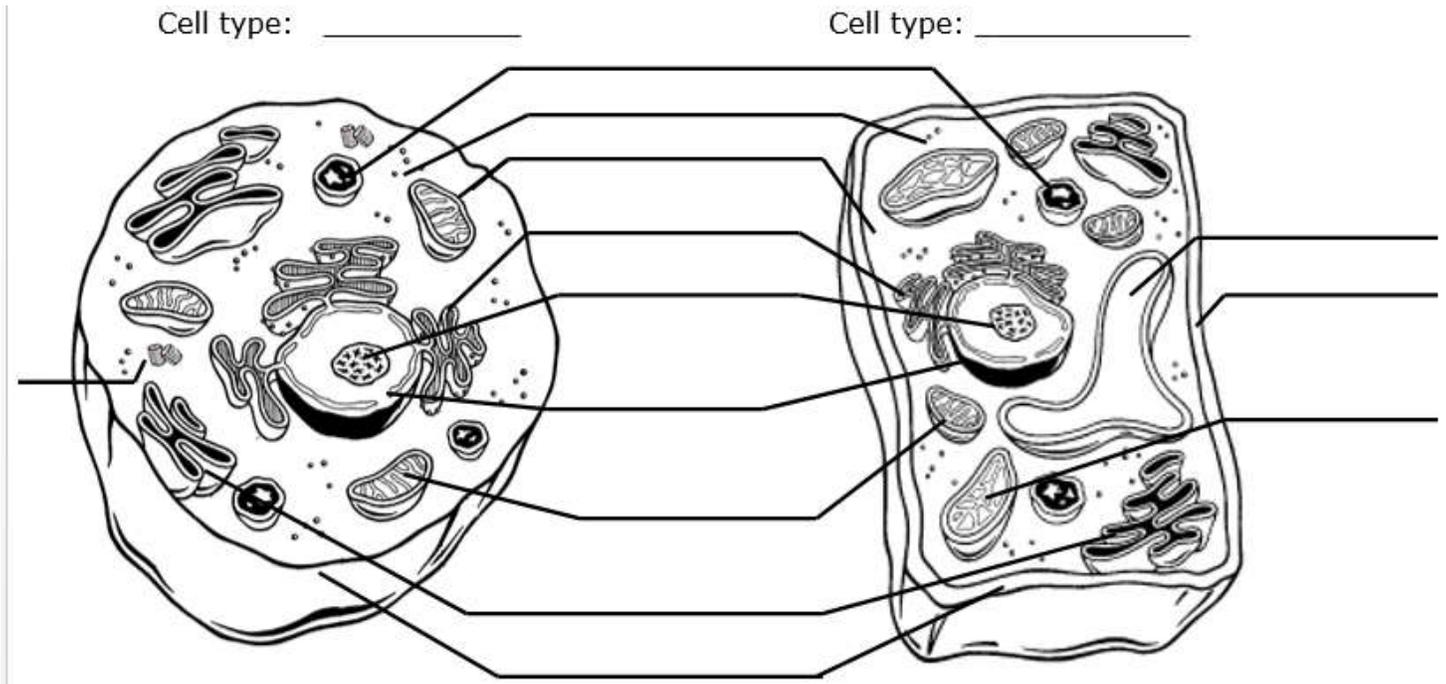


Unit 3A Review: Cells Review
Biology

Name _____
 Date _____ Block _____

Cell Parts: Label the organelles in the cells below and identify the cell type (plant vs. animal)



Identify the organelle (cell part) described by each function below.

Organelle	Function
	Assembles amino acids to make proteins
	Captures energy from the sunlight to produce food in plant cells
	Contains DNA, which controls the function of the cell and production of proteins.
	Controls what comes into and out of the cell. Found in plant and animal cells
	Gel-like fluid inside the cell where all the organelles are found
	Has passageways that carry proteins and other materials from one part of the cell to another (it's a transportER)
	Produces the energy a cell needs to carry out its function (it's the mighty organelle!)
	Receives protein and materials from the endoplasmic reticulum, packages, them, and distributes them.
	Rigid outer layer of a plant cell
	Stores food, water, wastes, and other materials (think vacuum bags)
	Use chemicals to break down food, waste, and worn out cell parts (think lysol)

Cell Differentiation/Specialization

- What does it mean when we say embryonic stems cells are **pluripotent**?
- Give an example of a specialized cell and its function.

Mitosis

- Identify the phase of mitosis shown in the following pictures.
- Number the pictures so that they are in order.
- Describe key features happening at each step.

Picture	Phase of Mitosis	Order (1 happens first, 5 last)	Key features
			
			
			
			
			

- At the end of mitosis, the 2 daughter cells have the _____ number of chromosomes (DNA) as the parent cell.

Cell Size

- How does the surface area to volume ratio affect a cell's ability to absorb nutrients and get rid of waste?
- Does a cell want a large or small surface area to volume ratio to be most efficient?