

Make a Model Cell

<u>Purpose:</u> To review and compare plant and animal cells, and then build a model of an animal cell.

Materials:

- A paper plate to represent the cell
- A variety of materials to represent cell parts such as pasta, pipe cleaners, pom-poms, beads, string, etc.
- Glue
- Index card (key)
- Inside of a Cell worksheet

Information:

In this activity, Make a Model Cell, you will compare a plant and animal cell and then make a model of an *animal cell*. You will select various items to represent cell structures and justify your choices by describing how the items you have chosen represent the actual parts of the cell. You will use information you have learned in previous lessons to help you complete this task.

Pre-Lab Questions:

- 1. What are the parts inside the cell?
- 2. What part of the cell keeps it intact?

Procedure:

- 1. Get the **Inside of the Cell** handout from your teacher.
- 2. Complete the first two columns on the sheet. Indicate whether each structure is part of a plant cell, animal cell or both by placing a check in the appropriate columns.
- 3. Decide with your partner which materials you will choose to make your *animal cell* model. Make a key on the index card to record the material you chose to represent each cell structure.
- 4. Get a plate from your teacher. This will represent the cell. Glue your materials to the plate so that they look like the organelles inside of a cell.
- 5. Continue to fill out the worksheet while you make your model.

Questions:

1. Which two cell parts listed on the worksheet chart did you not pick a material for? Explain why.

*Please mark a N/A (not applicable) in the "Materials Used" and "Why Used" boxes for these structures.

2. Why do we often depend on models?

3. Why are models useful when discussing cells?

4.	How is your model like a real cell?
5.	How is it different?
6.	What could we do to make this a model of a plant cell?