**Cell Comparison Lab – Teacher Sheet**

**Part 1 – Building a Cell Model**

Using the following materials, you will build a model of each type of cell –

**Prokaryotic Cell: Bacteria Cell**

Cell Membrane – snack size Ziploc bag

DNA – yarn

Cytoplasm – hair gel

Ribosomes – sprinkles

Flagella – ribbon

**Eukaryotic Cell: Plant and Animal Cells**

Cell Membrane – sandwich size Ziploc bag

Nucleus – clear capsule (can find vending machine capsules on amazon), Easter egg, plastic ornament that opens

DNA – yarn

Cytoplasm – hair gel

Ribosomes – sprinkles

Mitochondria – battery

Endoplasmic Reticulum – cut straws rubber banded together

Vacuoles – Marble - can use different sizes for animal and plant cells (has very large vacuoles)

Plant cell ONLY:

Chloroplast – green jolly rancher or green grape

Cell Wall – plastic storage container

**Teacher Notes:** You will need double the materials for the eukaryotic cells. The dollar store or stuff at home can easily be used too. Just make sure to update the canvas activity if you use something other than what is listed. I will be making all the cells for all my classes. They are good visuals for them. I also did not include all the cell organelles. Adv has them in their notes but I am keeping the models simple. The biggest take away with these models is whether it has a defined nucleus and the differentiation of the animal and plant cell for adv. (mainly the cell wall and chloroplast in the plant cell) You can also talk about limitations of models here as well which is a process tek.

**Part 2 – Comparing Prokaryotic and Eukaryotic Cells**

Students will use the diagrams in the canvas activity and answer the questions.

**Part 3 – Plant and Animal Cell Comparison - ADV only**

Students will use the diagrams in the canvas activity and answer the questions.