

NAME: _____

THE INCREDIBLE, EDIBLE CELL

Problem: How can you use gelatin and candy to make a model of a cell?

Hypothesis: _____

Materials:

- * 1 gumball *This is your **nucleus***
- * 2 blue or green pieces of fruit roll up *These are your **Golgi bodies***
- * 2 red or yellow pieces of fruit roll up *These are your **endoplasmic reticulum***
- * 1 teaspoon of round cake sprinkles *These are your **ribosomes***
- * 4 Hot Tamales cinnamon candies *These are your **mitochondria***
- * 4 chocolate covered raisins *These are your **vacuoles***
- * 1 Jello/Knox mixture in 9 oz plastic cup
- * 1 paper plate
- * 1 small plastic cup full of cell parts (organelle) materials
- * 1 plastic knife
- * 1 plastic spoon

Procedure:

- 1.** Get the Jello ready! Follow the package directions to mix up batches of gelatin mix. Pick a light colored flavor. Every 6 oz package will make up 4 or 5 cells. (TIP: Add some unflavored Knox gelatin to the Jello to make it set up a little stiffer.) Pour the mixture into plastic cups until they are about two-thirds full. Put them into a refrigerator to set. This is the end of today's work. Make sure to label your cups! Each team is going make two cells (one animal cell and one plant cell.)

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- 2.** Day Two, it's time to eat! Remove the Jello from the plastic cup onto the paper plate. You may need to run the knife around the outside edge of the Jello inside the cup to loosen it. Running warm water over the cup may also loosen the gelatin.
- 3.** Cut the Jello/Knox in half and remove the top half. Turn over the top and set it on the plate beside the bottom half.
- 4.** Use the spoon to dig out a hole in the bottom half of the Jello/Knox cytoplasm. Just pushing the food pieces into the Jello causes it to crack and come apart, making a very messy cell. Place the gumball in this hole to represent the nucleus of your cell.
- 5.** Using the spoon to make spaces and your diagram as a guide, place the other cell parts into the cell. Parts can be put into both the top and bottom half of the Jello/Knox cell.
- 6.** Take the top part of the cell and carefully place it on the top. If the cell feels soft, you can put the parts back into the plastic cup, and then turn it over onto the paper plate. Carefully remove the plastic cup.
- 7.** After reviewing the parts one final time, you and your partner can feast on your cell if you like! Please use clean spoons in case the spoon you were working with fell on the floor or the table.

Data: **In the space below, draw your cell and label its parts.**



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Conclusion:

1. What are organelles?

2. What organelles are found in plant cells?

3. What organelles are found in animal cells?

4. On the back of this page, briefly explain the function of these organelles:

nucleus

ribosomes

endoplasmic reticulum

Golgi body

mitochondria

vacuole