



HOMESCHOOL SCIENCE LAB



EXPERIMENT: Making a Model Cell with Gelatin and Various Candies

Name: _____ Date: _____



OBJECTIVE

To create a 3D model of an animal cell using gelatin and candies, and to identify the parts of the cell and their functions.

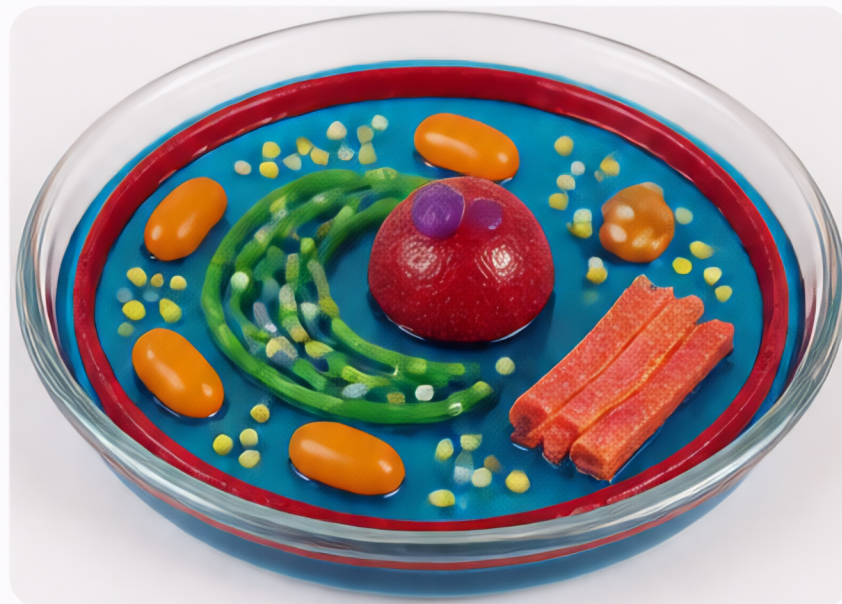


MATERIALS

- 1 box (3 oz) flavored gelatin (any color)
- 2 cups boiling water
- 1 cup cold water
- 1 clear dish or bowl (glass or plastic)
- Assorted candies (see guide below)
- Spoon
- Cup for measuring
- Refrigerator

CANDY GUIDE (Cell Part → Candy)

	Cell Membrane → Fruit Roll-Up (thin, flexible outer boundary)
	Cytoplasm → Gelatin (jelly that fills the cell)
	Nucleus → Large Gumdrop (control center of the cell)
	Nucleolus → Small Candy (inside the nucleus)
	Mitochondria → Jelly Beans (produce energy for the cell)
	Endoplasmic Reticulum → Licorice Strings (transports materials)
	Ribosomes → Nonpareils or Sprinkles (build proteins)
	Golgi Apparatus → Sour Belt (packages and ships materials)



PROCEDURE

1. In a bowl, dissolve the gelatin in 2 cups of boiling water. Stir for 2–3 minutes until completely dissolved.
2. Add 1 cup of cold water and stir.
3. Pour the gelatin into a clear dish or bowl.
4. Place in the refrigerator for 2–3 hours, or until the gelatin is firm but not too hard.
5. Once set, add the candies to the top of the gelatin to represent the cell parts. Use the Candy Guide to help you.
6. Make sure each candy is gently placed so the model stays neat.
7. Observe your model and label the parts.



OBSERVATIONS

1. Which part of the cell do you think is the most important?

2. What would happen if the cell membrane was not present?

3. How does this model help you understand real cells?



CONCLUSION

What did you learn from this experiment?



SCIENCE TIP:

Cells come in many shapes and sizes, but all cells have parts that help them live and work.