

The purpose of this project is to make a 3D model of a plant or animal cell to demonstrate knowledge and understanding of cell structure and function of organelles.

Using household items and non-perishable food make a three-dimensional model of a plant or animal cell that meets the criteria listed below. (Sample items: cereal, balloons, gummi worms, mints, dried fruit, matches, gum balls, rope licorice, jelly beans, other candies, toothpicks, clay, beads, pipecleaners, etc.)

Choose what type of cell you will build, a typical plant or animal cell. Include this label somewhere on your model.

Identify and create a KEY for each organelle on your model and include the organelle's function. Also on your key, name the item you used for each organelle.

Organelle List: cell membrane, cytoplasm, nucleus, nuclear envelope (or membrane), nucleolus, mitochondria, vacuoles, endoplasmic reticulum rough and smooth, ribosomes, Golgi apparatus (or Golgi Body), Lysosomes, cell wall (plant), chloroplasts (plant).

Rubric must be returned with project on due date as noted above. 5 points will be deducted if rubric is missing.

***Please note that this is an independent project. Students will receive a 0F and disciplinary actions will be taken for academic dishonesty if work is not original. You may not work with another student.

RUBRIC

Name: _____ Period: _____ CELL TYPE: _____

Name/Period/Cell Type Must Be labeled on Model

Caterory	Scoring Criteria	Excellent (10pts)	Satisfactory (8pts)	Minimal (5pts)	Not Observed (0pts)
Craftmanship	Model is creative, shows effort				
	The model is 3 dimensional				
	Model stays together and does not fall apart when moved				
	The model is colorful and all organelles are shown				
	The model is well constructed and not messy				
Cell Parts	Key, legend and labeling is easy to use to identify parts on the model				
	Functions of cell organelles are included (accurate)				
	Appropriate material is used so that it looks like the cell part it is modeling.				
	Parts are organized within the cell in their appropriate places.				
Written Word	Basic grammar, spelling on key and any other writing used in model				