### 7.12 D - 3D Cell Model

# This is what the state of Texas says seventh graders need to know about Cells

## 7.12 D Organisms and environments.

The student is expected to: differentiate between structure and function in plant and animal cell organelles, including cell membrane, cell wall, nucleus, cytoplasm, mitochondrion, chloroplast, and vacuole.

**Directions**: It is cell project time! Carefully read and follow the steps below to make your cell project!

### 3D Model- must haves:

- Must be 3D you can use food, clay, Legos, or ANY other materials (Flat drawings on poster board does not count)
- $\checkmark$  Each organelle below needs to be present and labeled on the project.
- Each label also needs to state the function of the organelle, it can be labeled directly on the project OR a separate list that identifies the function can be turned in.
  Ex. Nucleus - Control Center. (tells others what to do)
- $\checkmark$  Students must provide all materials they need to complete the project.

Step one: Decide and circle which cell you want to make or write about.

Animal

Plant

Step two: Due Date (Turn in by) Tuesday, Feb. 4, 2020

Must include each of the following:

### Animal and Plant Cell Rubric:

Must include each of the following labels:

- Animal Cell or a Plant Cell (5)
- Cell Membrane (5)
- Function (5)
- Cell Wall (or a statement "Only in Plants") (5)
- $\circ$  Function (5)
- Nucleus (5)
- Function (5)
- Cytoplasm (5)
- Function (5)
- Mitochondrion (5)
- Function (5)
- Chloroplast (or a statement "Only in Plants") (5)
- Function (5)
- Vacuole (5)
- Function (5)

#### Planning Guide:

Commonly Forgotten Items:

- 1. Do NOT forget to put the function of each organelle on the label OR turn in a separate list of functions. Labeling/functions make up 60% of the grade.
- Animal cells are roundish and plant cells are rectangular. If you are going to make a rectangular project it NEEDS to be a plant cell and roundish shaped cells NEED to be animal cells.
- 3. Do NOT forget to label your cell as either PLANT or ANIMAL.
- 4. Do NOT forget that your rubric shows each organelle you need and has a place for you to check if you included it as well as its function. If you check your project first, you should get a higher grade.
- 5. The projects will be graded according to the rubric and should reflect the student's work and creativity. These projects do not need to become expensive. The students were showed several projects in class that cost little to nothing, but were creative.

For Teacher use only:						
Total from lab	eled structu	res: (total fro	om rubric)			/60
Neatness:	5	10	15	20		/20
Creativity:	5	10	15	20		/20
					Total:	/100
Comments:						