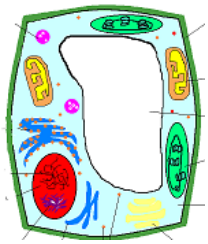
Name _____ Period_____ Date_____

Cells Research and Design



Part A: Research various images of plant and animal cells using the following sites or locate your own using a search engine.

Site 1: http://www.biology.ualberta.ca/facilities/multimedia/

Site 2: www.cellsalive.com

Site 3: Wisc-Online Animal Cell

Site 4: Interactive Concepts in Biochemistry - Cell Structure

Site 5: Cell Biology Animation

You may want to print out this chart and keep track of your research. You will use the information to make your own digital cell model.

	Found In (check)			Function	Sketch
	Animal	Plant	Bacteria		
Nucleus					
Chromatin (DNA)					
Lysosome					
Mitochondria					
Flagella					
Smooth ER					
Rough ER					
Golgi Apparatus					
Cytoplasm					
Ribosome					
Nucleolus					
Cell Wall					
Vacuole					
Chloroplast					

Part B: Build Your Own Cell Model

You may choose to make an art project type 3-D cell or a Computer virtual 3-D cell. You only need to choose one type. You can choose to make an animal cell or a plant cell.

Which one do you choose? (Circle one) Art-type Virtual 3-D

Plant or animal? (Circle one) Animal Plant

Guidelines for Art-type 3-D Cell:

- You may make a cell model out of art materials. No food may be used to make a model.
- The model must be large enough to display details but no larger than 8 inches across.
- All cell structures must be identified and labeled, including your name and period.
- I must grade your project by physically viewing the project in my classroom. No pictures will be accepted.

Guidelines for creating a Virtual 3-D Cell:

- Using image editing software (Microsoft Paint, Photoshop, etc) create your own color diagram of the cell.
- Turn in your model using a flash drive or email to mazzpp@fusd.net Put your name on both the email and the project.
- There are also several online image editors:
  Pixlr (http://www.pixlr.com/editor/) Sumopaint (http://www.sumopaint.com/home/)
- Identify, on your project, whether your cell is a plant or an animal (no bacteria)
- All relevant cell organelles and parts must be represented and labeled
- You may NOT cut/paste other models you might find on the web, but you're welcome to use them for ideas.
- Extra Points if model is 3-Dimensional.

Grading Rubric					
Name					
	4	3	2	1	0
Research Phase - table completed					
Design - Labels (accurate, easy to read)					
Design -Complexity (number of organelles represented, effort)					
Design -Accuracy (organelles look as they should, positioning)					
Design - Effort, overall appearance					
Assignment Turned in one-time (- 1 pt. per day late) **Due Nov. 7, 2016**					
TOTAL					