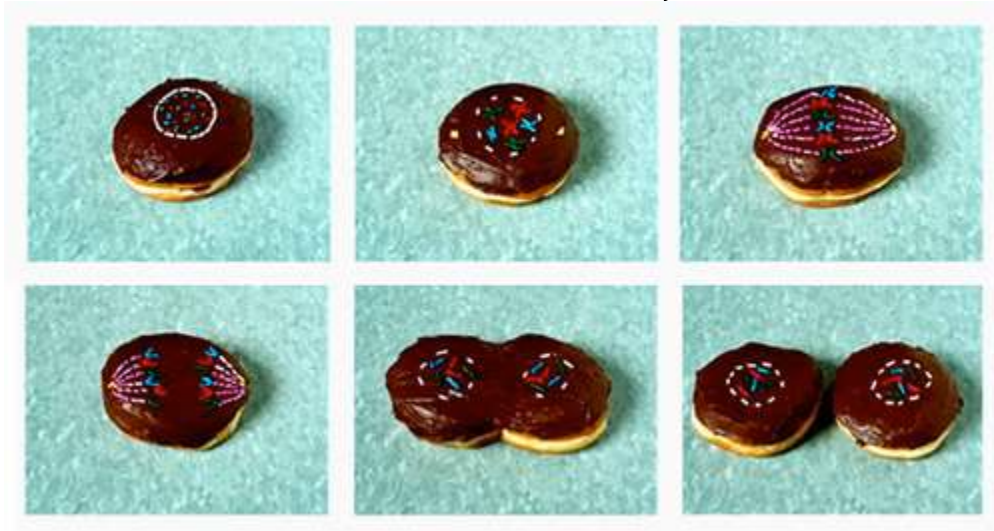


Name _____ Period _____ Date _____

Due Date _____

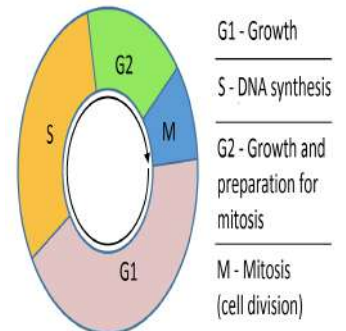
Cell Division Project



Directions: Research and inform yourself in the cell division process of Mitosis. To demonstrate your understanding of the process of mitosis, read through the following assessment options and choose one to complete. You may work **individually** or with **ONE partner** only.

Every project must include all of the following:

- a. Explanation of what happens during (30 points)
 - a. Interphase
 - b. Prophase
 - c. Metaphase
 - d. Anaphase
 - e. Telophase
 - f. Cytokinesis
- b. The role of and what happens to chromosomes, centrioles, centromeres, spindle fibers, nucleus, cell membrane. (10 points)
- c. The end result (10 points)



Project Options:

1. Write and perform (or make a music video) of a song or rap for the class that explains the process of mitosis. It must consist of at least 8 paragraphs (verses) and be at least 2 minutes long. Make sure to provide a copy of the lyrics or the poem.
2. Create and present to the class a 3-D visual representation (mobile, model, etc.) that explains the process of mitosis. You may use a variety of materials to create your model. This must also include a written explanation of what is happening at each stage.
3. Create a mitosis game. It can be a board game or a game you can play with the class on the smart board. You must include illustrations and/or pictures, etc. and in your presentation, explain to the class how this game explains the process of mitosis.
4. Write a children's book using lots of illustrations to help explain mitosis. Include descriptions of what happens at each stage, but remember, it should be written for children, so explain things in simple terms.
5. Create a flipbook showing the phases of mitosis. This should be no less than 20 pages. Each cell drawing should be in color and visually appealing. Each page should vary only slightly from the drawing previous to it and when the pages are flipped the cell cycle appears to be in motion. * (if you choose this option, you must work alone).
6. Make a short live or animated video that explains the process of mitosis. It must include visual representations of mitosis. (You shouldn't just stand there and explain mitosis).
7. Write a comic strip or comic book depicting what happens during mitosis. You should create some sort of story that incorporates all of the components and phases.

Criteria	0	1	2	3	4	5
Interphase explanation	This stage was not covered in the project	Stage was mentioned but no information provided	Stage was mentioned and minimal information provided	Stage was included and some information is missing	Explanation of stage was complete but not in detail	Complete explanation of the cell during this stage of cell cycle including detailed information
Prophase explanation	This stage was not covered in the project	Stage was mentioned but no information provided	Stage was mentioned and minimal information provided	Stage was included and some information is missing	Explanation of stage was complete but not in detail	Complete explanation of the cell during this stage of cell cycle including detailed information
Metaphase explanation	This stage was not covered in the project	Stage was mentioned but no information provided	Stage was mentioned and minimal information provided	Stage was included and some information is missing	Explanation of stage was complete but not in detail	Complete explanation of the cell during this stage of cell cycle including detailed information
Anaphase explanation	This stage was not covered in the project	Stage was mentioned but no information provided	Stage was mentioned and minimal information provided	Stage was included and some information is missing	Explanation of stage was complete but not in detail	Complete explanation of the cell during this stage of cell cycle including detailed information

Criteria	0	1	2	3	4	5
Telophase explanation	This stage was not covered in the project	Stage was mentioned but no information provided	Stage was mentioned and minimal information provided	Stage was included and some information is missing	Explanation of stage was complete but not in detail	Complete explanation of the cell during this stage of cell cycle including detailed information
Cytokinesis explanation	This stage was not covered in the project	Stage was mentioned but no information provided	Stage was mentioned and minimal information provided	Stage was included and some information is missing	Explanation of stage was complete but not in detail	Complete explanation of the cell during this stage of cell cycle including detailed information
Role of chromosomes and organelles	This information was not covered in the project (Points x 2)	Role of chromosomes and organelles is mentioned but no information provided (Points x 2)	Role of chromosomes and organelles has minimal information provided (Points x 2)	Role of the chromosomes and organelles is missing information (Points x 2)	Role of the chromosomes and organelles is complete but not in detail (Points x 2)	Complete explanation of organelles during the cell cycle including detailed information (Points x 2)
End result of each stage and cell cycle	This information was not covered in the project (Points x 2)	End results are mentioned but no information provided (Points x 2)	End results has minimal information provided (Points x 2)	End results are mentioned but is missing information (Points x 2)	End results of cell cycle are complete but not in detail (Points x 2)	Complete explanation of the cell during this stage of cell cycle including detailed information (Points x 2)
Total Score:						/50

