

Modeling Cell Cycle Phases

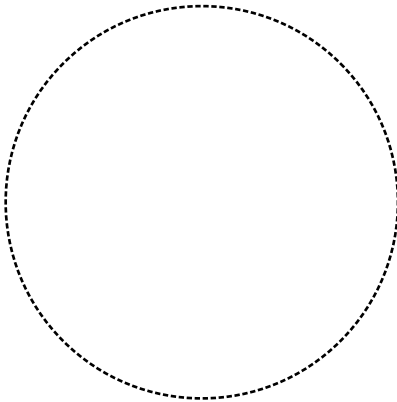
Activity from LearnEd Notebooks
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You will be designing your own model of the phases of the cell cycle in a display. You will either make a series of posters, models or an edible display representing each phase of the cell cycle.

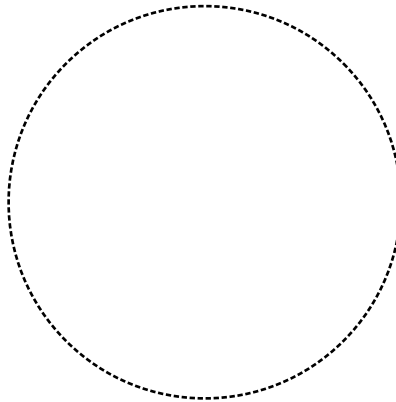
Edible option:

- Working in groups of 4-5, each person must obtain a cream-filled cookie.
- Carefully remove one side of the cookie, doing your best to keep all of the cream on the other side.
- Each person will design a cookie to represent a different phase of the cell cycle (interphase, prophase, metaphase, anaphase, telophase). Decide who will be completing each phase in your group.
- Using different colored sprinkles, show the steps of mitosis based on a diploid chromosome number of 4.
- When you have completed the activity, fill in the diagrams below, showing the events of each phase.

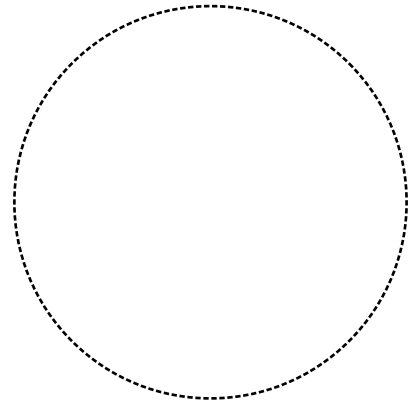
Interphase



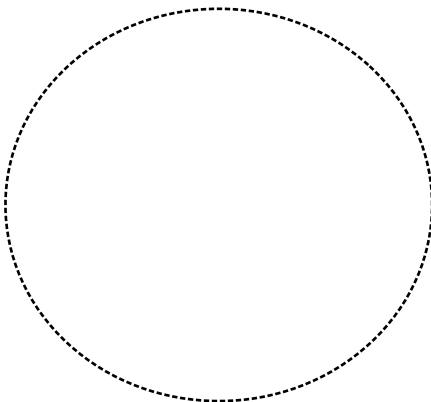
Prophase



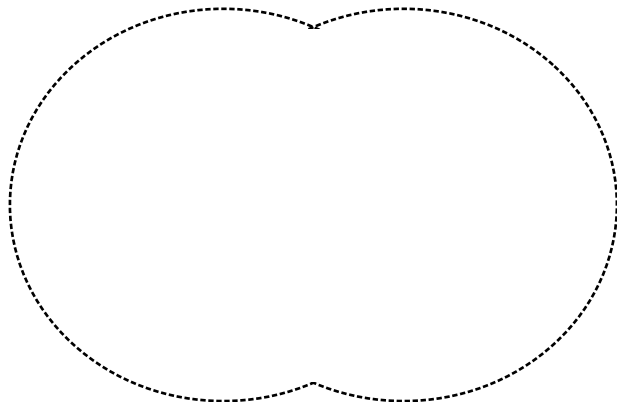
Metaphase



Anaphase



Telophase



1. The parent cell has four chromosomes. After the cell cycle occurs, how many chromosomes are in each of the daughter cells? _____
2. Is mitosis considered sexual or asexual reproduction of cells? _____
3. In which phase does the cell grow and prepare to divide? _____
4. What is the final event that occurs in the cell cycle (as the cell divides completely into two cells)?
