

Mitosis Play-Doh

Directions: Follow each direction carefully, and check with your teacher before drawing any of the phases. Use your notes from yesterday and the slide on the Board to help with creating your models, drawing the phases, and answering the questions.

1. Using the Play-Doh, create a cell that includes a cell membrane, a nuclear membrane, and three chromosomes in the nuclear membrane. Draw your model in the square provided to the right.

What is the function of the cell membrane? _____

What are chromosomes? _____



2. Adjust your model so that it shows the cell undergoing prophase. Draw your model in the square provided to the right.

What three things occur during prophase? _____



3. Adjust your model so that it shows the cell undergoing metaphase. Draw your model in the square provided to the right.

What happens to the chromosomes during metaphase? _____

What do the spindle fibers attach to on the chromosomes? _____



4. Adjust our model so that it shows the next stage of mitosis. Draw your model in the square provided to the right.

What is the next stage of mitosis? _____

What happens during this stage? _____



5. Adjust your model so that it shows the cell undergoing telophase. Draw your model in the square provided to the right.

What four things occur during telophase? _____



6. How many cells are produced after telophase and cytokinesis have concluded? _____

7. Are the cells that are produced haploid, diploid, or polyploidy? _____

8. In humans, how many chromosomes does the parent cell have? _____

9. In humans, how many chromosomes does each daughter cell have after mitosis? _____

10. Which type of cell undergoes mitosis? (scientific term and general term) _____

11. What are the purposes of mitosis? _____

12. After mitosis is complete, what stage of the cell cycle does the cell enter? _____