

# Quizizz

Name : \_\_\_\_\_

Class : \_\_\_\_\_

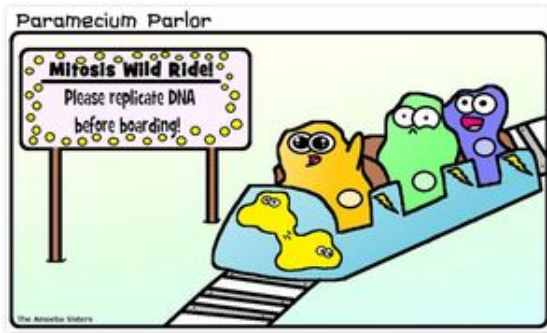
## Amoeba Sisters: Mitosis vs. Meiosis Challenge!

Date : \_\_\_\_\_

1. **Interphase** is when a cell is growing, replicating its DNA, and carrying out cell processes. Which of these is correct regarding its occurrence?

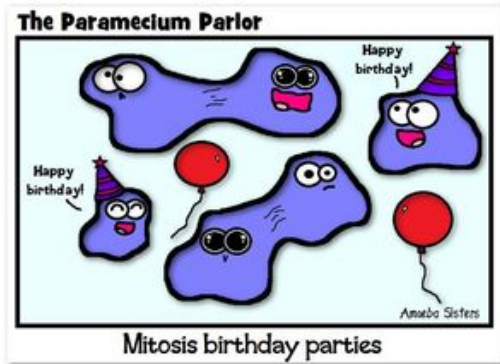


- a) It occurs once before mitosis and once before meiosis.
- b) It occurs once before mitosis and twice before meiosis.
- c) It occurs once before mitosis and does not occur before meiosis.
- d) It does not occur before mitosis and occurs once before meiosis.
2. Why would it be important to **replicate DNA before** a cell divides in mitosis or meiosis?



- a) In order for genetic information to be transferred into daughter cells.
- b) In order for the cell to be able to increase in size.
- c) In order for the DNA to be contained in the nucleus.
- d) In order for the cell to re-order the DNA sequencing in the new cells.

3. In **mitosis**, the two resulting cells are



- |   |   |
|---|---|
| <input type="checkbox"/> a) different from the starting cell and identical to each other. | <input type="checkbox"/> b) different from the starting cell and different from each other. |
| <input type="checkbox"/> c) identical to the starting cell and different from each other. | <input type="checkbox"/> d) identical to the starting cell and identical to each other.     |

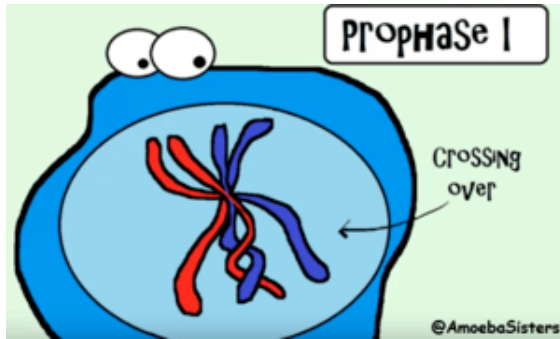
4. **Meiosis** produces different types of cells than mitosis. If there was a "meiosis club," all of these cells could be included EXCEPT

(Which cell type is not produced in meiosis?)



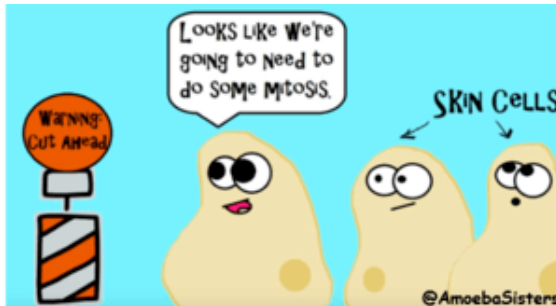
- |   |  |
|---|--|
| <input type="checkbox"/> a) gametes     | <input type="checkbox"/> b) body cells |
| <input type="checkbox"/> c) sperm cells | <input type="checkbox"/> d) egg cells  |

5. In **meiosis**, **crossing over** occurs in prophase 1. What is the significance of this event?



- a) This process ensures that chromosomes are evenly divided into daughter cells.
- b) This process can lead to genetic variation in daughter cells.
- c) This process can create gaps in the chromosome DNA for RNA to bind.
- d) This process allows for spindles to connect to the chromosomes in order to pull chromosomes apart.

6. **Mitosis** is useful for the creation of new cells which is important for all of the following EXCEPT



- a) organism growth.
- b) repair of damage.
- c) replacement of worn out cells.
- d) generation of gametes.

7. Fruit fly body cells have 8 chromosomes. After **mitosis**, you would expect a resulting **fruit fly daughter cell** to have -



- a) 16 chromosomes.
- b) 46 chromosomes.
- c) 8 chromosomes.
- d) 4 chromosomes.