Genetics

Brainpop-Mitosis

Watch the Brainpop on growth, then answer the questions below. You can check your work using Chapter 5, Section 2 of your textbook.

_____1. How do cells grow?

- a. by increasing the size of their nuclei
- b. by dividing to make two cells
- c. by taking in water and slowly expanding
- _____2. In cell division, which part divides first?
 - a. The nucleus
 - b. The cell membrane
 - c. The cell wall
 - ____ 3. What is a chromosome?
 - a. a small piece of a cell membrane
 - b. two DNA molecules held together by a centromere
 - c. the protein center of a cell
- _____4. How many chromosomes are in one cell of a human?
 - a. 1
 - b. 23
 - c. 46

_____ 5. During the start of mitosis (prophase) which structures become visible?

- a. duplicated cell walls
- b. duplicated nuclei
- c. duplicated chromosomes

Name:

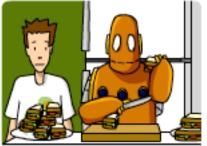
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6. When do duplicated chromosomes line up across the center of the cell?

- a. during the start of mitosis (prophase)
- b. during the middle of mitosis (metaphase)
- c. during the end of mitosis (telophase)
- ____7. What happens at the end of mitosis?
 - a. the cell membrane splits
 - b. the nucleus splits again
 - c. the chromosomes merge

_____ 8. How is plant cell mitosis different from animal cell mitosis?

- a. plant cells have rigid cell walls and no centrioles
- b. plant cells don't undergo mitosis
- c. plant cell mitosis is much slower
- ____ 9. What does mitosis produce?
 - a. Two different nuclei with similar chromosomes
 - b. Two identical nuclei with the same chromosomes as the parent cell
 - c. Nuclei that have half of their chromosomes from each of the two parent cells



Take a close look at this picture from the cartoon. What does it have to do with mitosis?