

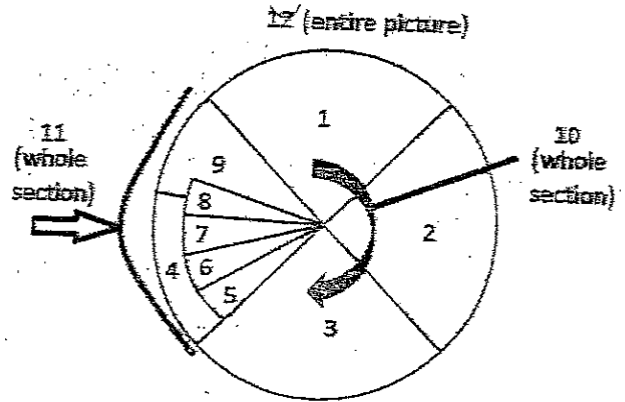
Mitosis Review

Name: _____

Match each term to its location on the diagram.

- Anaphase _____
- Cell cycle _____
- Cytokinesis _____
- G1 _____
- G2 _____
- Interphase _____

- Metaphase _____
- M phase _____
- Mitosis _____
- Prophase _____
- S phase _____
- Telophase _____



Match each term to its description.

- Anaphase _____
- Cytokinesis _____
- G1 _____
- G2 _____
- Interphase _____
- Metaphase _____
- M phase _____
- Mitosis _____
- Prophase _____
- S phase _____
- Telophase _____

- A. DNA synthesis (DNA copies itself)
- B. Phase of mitosis- chromosomes line up at the equator (middle of cell)
- C. Exact copies of cells are made through this division of the nucleus: includes prophase, metaphase, anaphase, and telophase
- D. Pinching together and then splitting of cytoplasm after the process of mitosis, results in two separate, small cells at the end
- E. Phase of cell cycle that includes mitosis and cytokinesis
- F. Cell grows
- G. Phase of mitosis- chromosomes arrive at opposite poles, chromosomes dissolve, and new nuclear membranes form
- H. Phase of mitosis- includes condensation of chromatin into chromosomes, nuclear membrane dissolves, and spindle forms
- I. "resting phase"- cells spend most of their time in this phase, which includes cell growth, copying of organelles, and DNA synthesis
- J. Phase of mitosis- chromosomes move away from equator to poles
- K. Cell grows, copies its organelles

True-False: Change the underlined statement of any false statements to make the sentence true.

1. The cell cycle is when the cell grows, prepares for division, and divides. _____
2. Cells rely on cyclins and regulators to determine when the next phase happens.

3. Mitosis produces two genetically different cells, also called asexual reproduction.

4. Mitosis is the division of the nucleus, cytokinesis is the division of the cytoplasm.

5. Interphase is made up of three parts: G1, G2, and M phases. _____
6. Interphase is when the cell "rests" between divisions. _____
7. M phase includes mitosis and cytokinesis. _____
8. Chromosomes form from chromatin, the nuclear membrane dissolves, and the spindle forms in metaphase. _____
9. S phase is the part of interphase when DNA copies. _____

10. A chromatid and its duplicate chromatid are joined at the centromere.

11. In anaphase, chromosomes move away from the center to the equator of the cell.

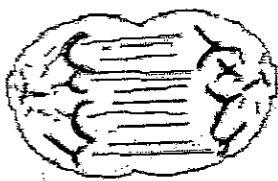
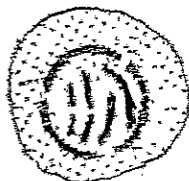
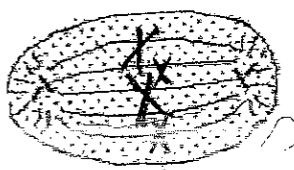
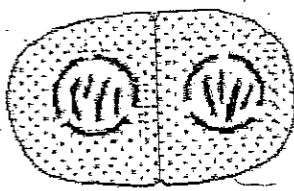
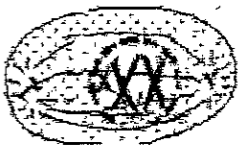
12. In telophase, the chromosomes dissolve back into chromatin, a new nuclear membrane forms, the spindle breaks apart, and a nucleolus becomes visible.

13. In cytokinesis, the nucleus divides as the last step of the cell cycle, which ultimately results in two identical daughter cells.

14. The parts of mitosis (in order): prophase, metaphase, anaphase, and telophase.

15. Cancers occur when cell division gets out of control, and the cells no longer respond to signals.

Label the pictures using the word bank: anaphase, interphase, metaphase, prophase, telophase. Then put the phases in order using the numbers 1-5, starting with interphase (1).

	LABELS	ORDER
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____