Cell Cycle/ Mitosis Unit Exam

Name and Date_

Matching: match the term to the description

- A. Prophase B. Interphase C. Telophase D. Metaphase E. Anaphase
- 1. Sister Chromatids are moving apart from one another.
- 2. The nuclear envelope disappears.
- 3. The nuclear envelope reappears._____
- 4. Cytoplasm divides in this phase.
- 5. Chromatids line up along the middle of the cell.
- 6. The cleavage furrow appears._
- 7. Chromosomes are replicated and form two identical sets.
- 8. Chromosomes move towards opposite poles of the cell.
- 9. Chromosomes disappear from view._____
- 10. DNA looks like loose spaghetti during this phase._____

Visualize Phases: For each phase, draw a simple picture representing the phase.

Prophase	
Metaphase	
Anaphase	
Telophase	

Cytokinesis	

Fill in the blank: answers from the answer bank may be used more than one time or not at all.

A) Prophase	B) Interphase	C)Telophase	D)Metaphase
E) Four	F) Centromere	G) Chromatid	H) Cytokinesis
I) Mitosis	J) Spindle Fiber	K) Cell Plate	L) Centromere

- 11. What phase are identical daughter cells in as a result of mitosis? _____
- 12. How many phases are there in the cell cycle? _
- 13. What structure forms in prophase along which the chromosomes move? _____
- 14. Which phase of the cell cycle is characterized by a cell that is not dividing?
- 15. What forms across the center of a cell near the end of telophase?

Short Answer: Answer the following questions fully.

1. The cell cycle has four main stages. List these stages and describe what occurs during **one** of them.

2. How do our cells undergoing division keep us healthy? Describe a time you saw cell division in action.

3. What is cancer? How can it be dangerous for organisms that experience it?