

CELL DIVISION REVIEW PACKET

Answer the following questions about cell division.

Name _____

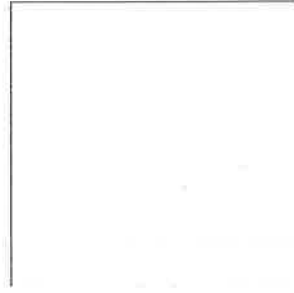
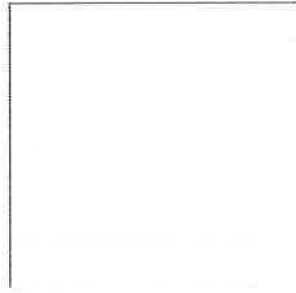
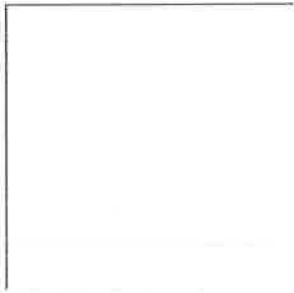
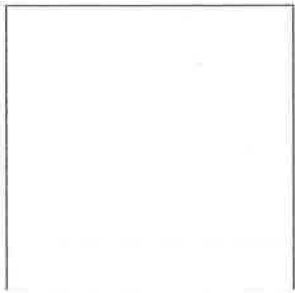
Date _____ Period _____

1. Imagine you are skin tissue and one of your cells dies. Describe the process to fill in the gap with a new cell. Include pictures.

2. Write a paragraph explaining what would happen to you if your cells kept dividing and never stayed in Interphase.

3. Draw the steps of Mitosis in the correct order including labels and a short description of what happens during each phase.

1. _____ 2. _____ 3. _____ 4. _____



4. Compare and Contrast: How is Cytokinesis in plant cells similar to and different from Cytokinesis in animal cells?

Lesson Quiz

Cell Division

Write the letter of the correct answer on the line at the left.

1. _____ The total number of cells in an organism increases as a result of which process?
A respiration
B photosynthesis
C cell division
D fermentation
2. _____ The formation of a cell plate is a characteristic of
A cytokinesis in plant cells
B cytokinesis in animal cells
C both A and B
D neither A nor B
3. _____ Chromatids are held together by a
A spindle fiber
B centromere
C cell plate
D centriole
4. _____ The correct order for the parts of mitosis are
A prophase, interphase, metaphase, anaphase
B telophase, anaphase, metaphase, prophase
C interphase, prophase, metaphase, telophase
D prophase, metaphase, anaphase, telophase

If the statement is true, write *true*. If the statement is false, change the underlined word or words to make the statement true.

5. _____ Cell division allows organisms to grow, repair damaged structures, and produce energy.
6. _____ Mitosis results in the formation of two daughter cells.
7. _____ The process in which the cell makes an exact copy of the DNA in its nucleus is replication.
8. _____ Cell growth and production of new organelles and enzymes are characteristics of prophase.
9. _____ It would take five cell divisions for one original cell to produce 128 new cells.
10. _____ The two rod-like parts that make up a chromosome are called chromatids.

Review and Reinforce

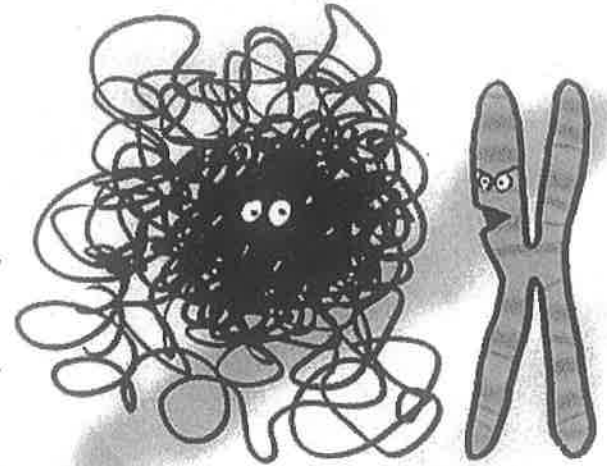
Cell Division

Understanding Main Ideas

Fill in the blanks in the table below.

Phases of Mitosis

Phase	Event
Prophase	1.
2.	Chromosomes attach to spindle fibers.
Anaphase	3.
4.	New nuclear envelope forms.



Dude, mitosis starts in five minutes...
I can't believe you're not condensed yet.

Answer the following questions

- Which stage of the cell cycle usually lasts the longest?
- During which stage of the cell cycle does DNA replication occur?
- During which stage of the cell cycle does the cell membrane pinch the cell into two?

Building Vocabulary

Match each term with its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

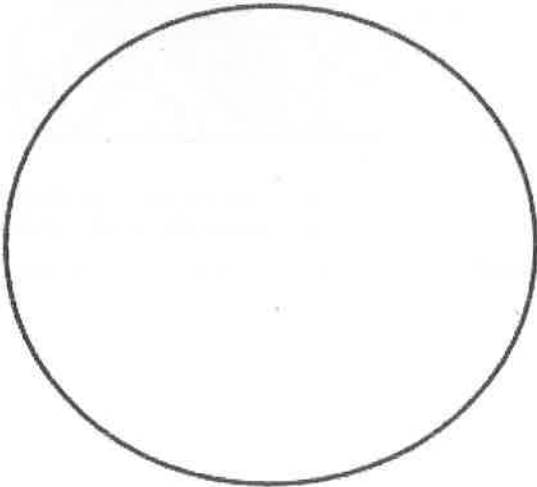
- | | |
|-----------------|--|
| 8. interphase | a. regular sequence of growth and division that cells undergo |
| 9. mitosis | b. first stage of the cell cycle |
| 10. cell cycle | c. process in which DNA is copied |
| 11. cytokinesis | d. stage of the cell cycle during which the cell's nucleus divides |
| 12. replication | e. doubled rod of condensed chromatin |
| 13. chromosome | f. final stage of the cell cycle |

Allium Root Tip Observation

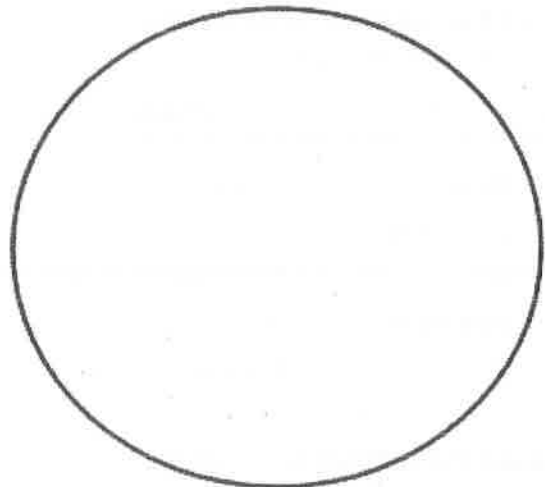
Name _____

Look at the onion root tip cells arranged in rows using the low powered magnification (10x) on the microscopes. The DNA in these cells has been stained to make it more visible. Draw what you see. You must identify and accurately draw each of the phases of the cell cycle shown below. NEATNESS COUNTS!

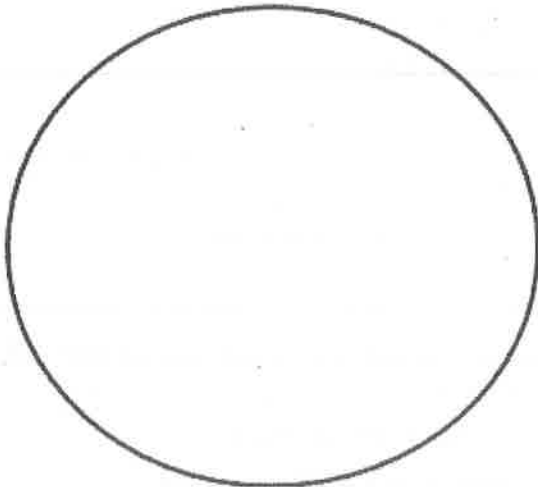
Prophase



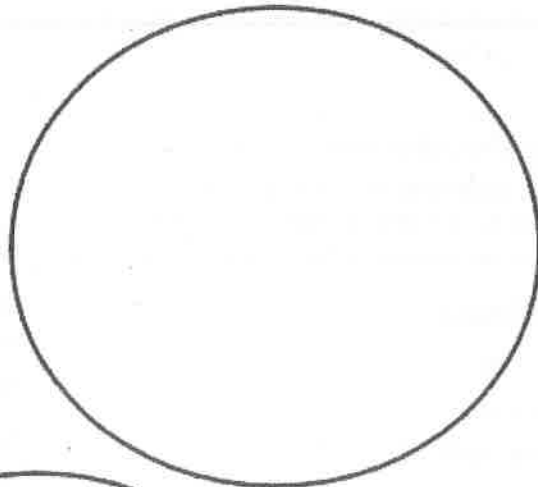
Metaphase



Anaphase



Telophase/Cytokinesis



Interphase

