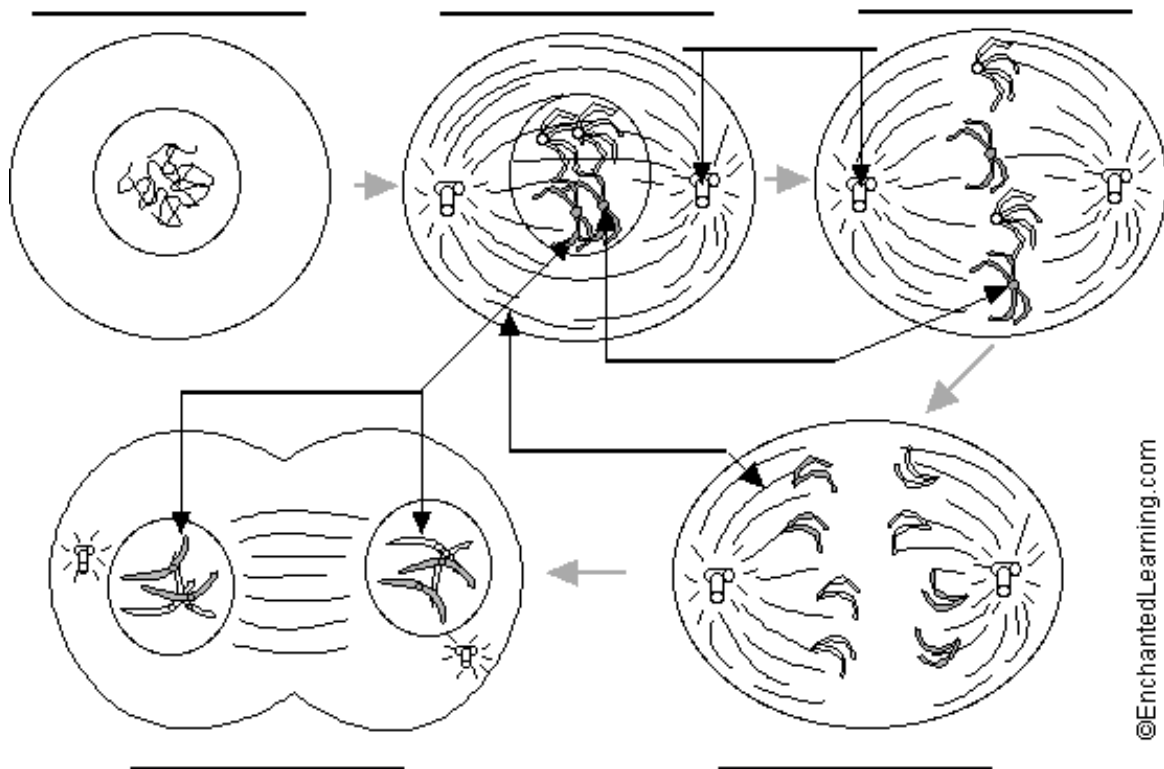


Mitosis Worksheet

Name: _____

Date: _____

1. Label the following diagram with the phase of mitosis, (a) through (e), or the type of cell structure, (f) through (h), seen during mitosis.



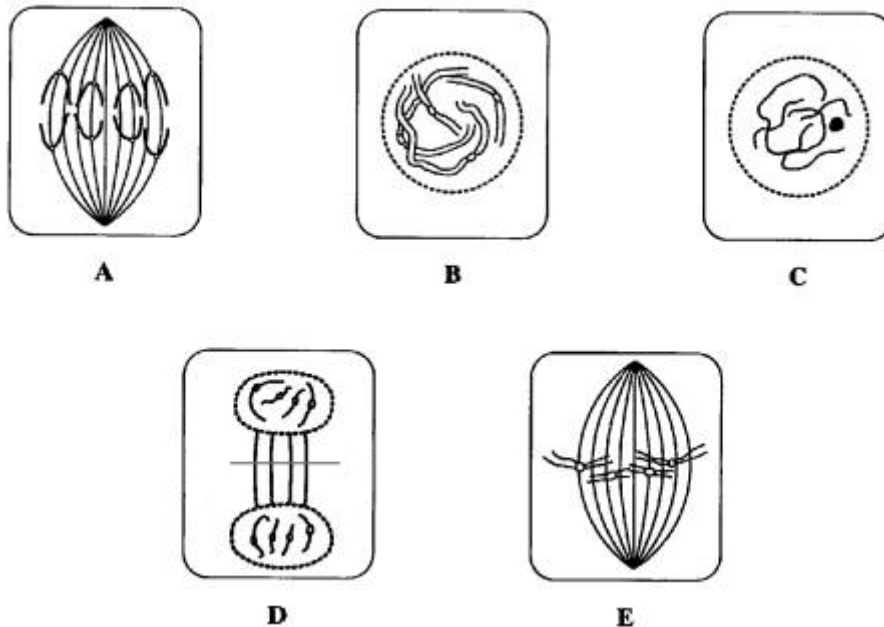
©EnchantedLearning.com

2. During which stage of a cell's cycle do the replicated chromosomes thicken and become visible? _____
3. During which stage of a cell's cycle do the replicated chromosomes line up on the equator of the cell? _____
4. During which stage of a cell's cycle do the chromosomes replicate? _____

5. The drawing below has been made from a photograph showing a cell undergoing mitosis. Based on the drawing, in what stage of mitosis must the cell have been in?



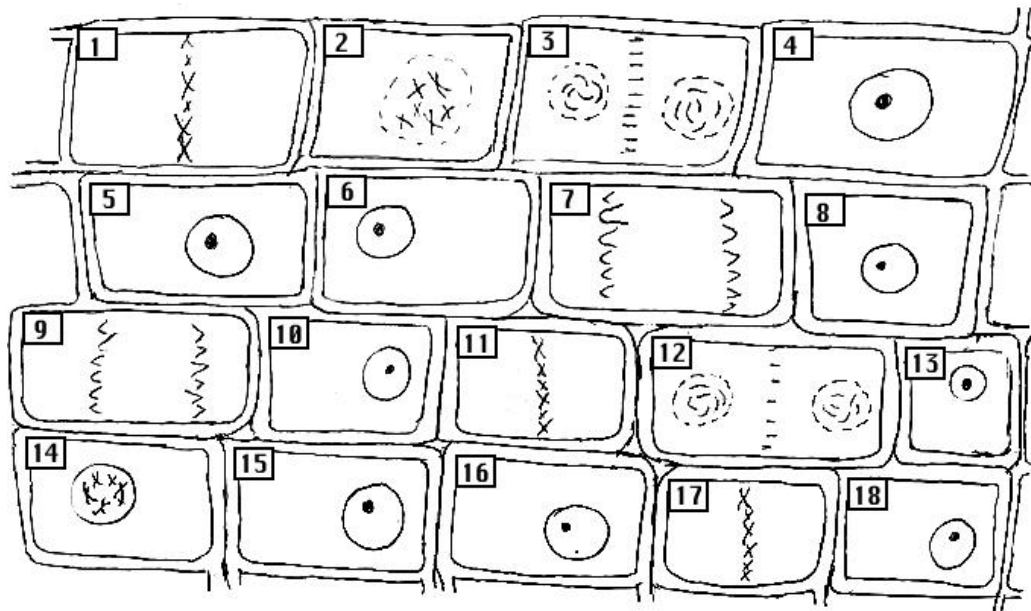
6. The drawings A-E show stages of mitosis in an plant cell.



- (a) Which of the drawings A -E shows
- (i) interphase _____ (**DNA** is replicated)
 - (ii) prophase _____ (**chromosomes – 2 sister chromatids – shorten**)
 - (iii) metaphase _____ (**sister chromatids** line up)
 - (iv) anaphase _____ (**sister chromatids** separate)
 - (v) telophase _____ (new nucleus forms at each end)
 - (vi) cytokinesis _____ (cell contents divided between **2 daughter cells**)
- (b) Give two processes which occur during interphase and which are necessary for mitosis to take place.

_____ of the cell and _____ of the DNA

7. This drawings shows various stages of mitosis in a fast growing onion root tip.



Identify the cells (by number) which are in the following stages of mitosis:

- interphase _____
- prophase _____
- metaphase _____
- anaphase _____
- telophase _____

8. Using colored pens or pencils, show how 2 chromosomes are passed from parent cell to two daughter cells.

