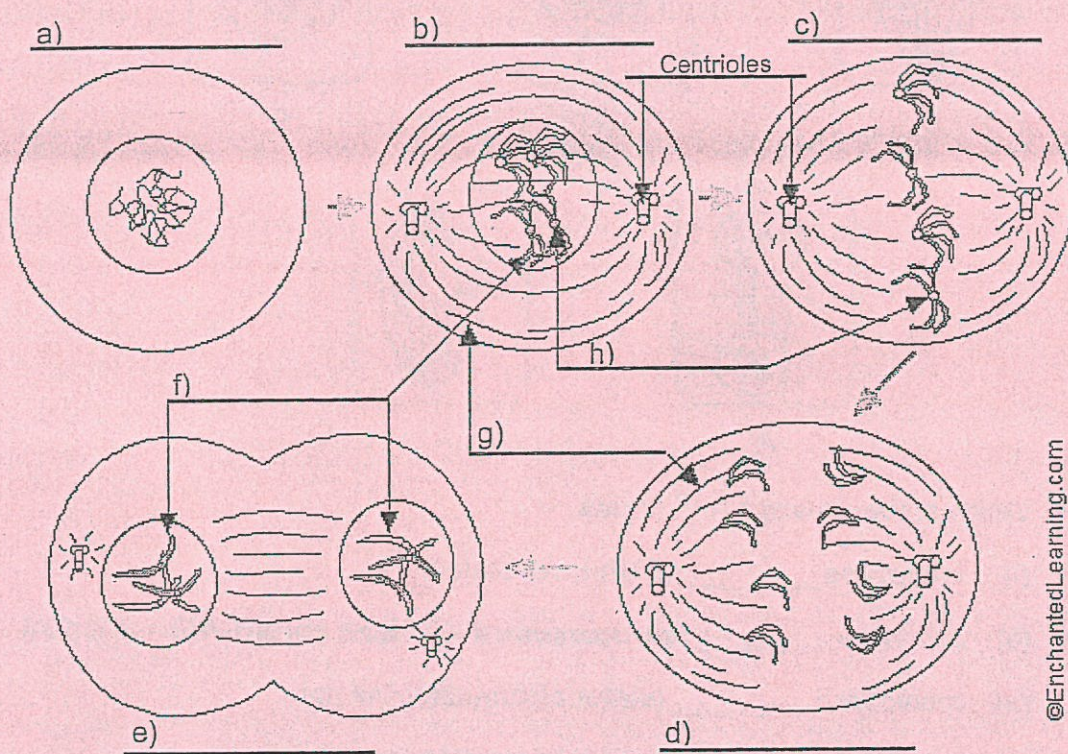


Mitosis Worksheet

Name: _____

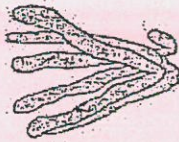
Date: _____

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.



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

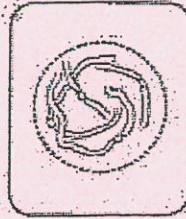
5. The drawing below has been made from a photograph showing a cell undergoing mitosis. Based on the drawing, in what stage of mitosis must the cell have been in?



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



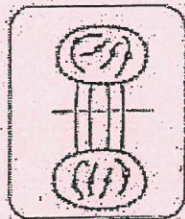
A



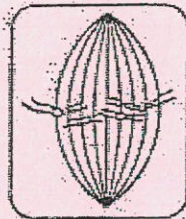
B



C



D



E

- (a) Which of the drawings A -E shows
- interphase _____ (DNA is replicated)
 - prophase _____ (chromosomes – 2 sister chromatids – shorten)
 - metaphase _____ (sister chromatids line up)
 - anaphase _____ (sister chromatids separate)
 - telophase _____ (new nucleus forms at each end)
 - 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

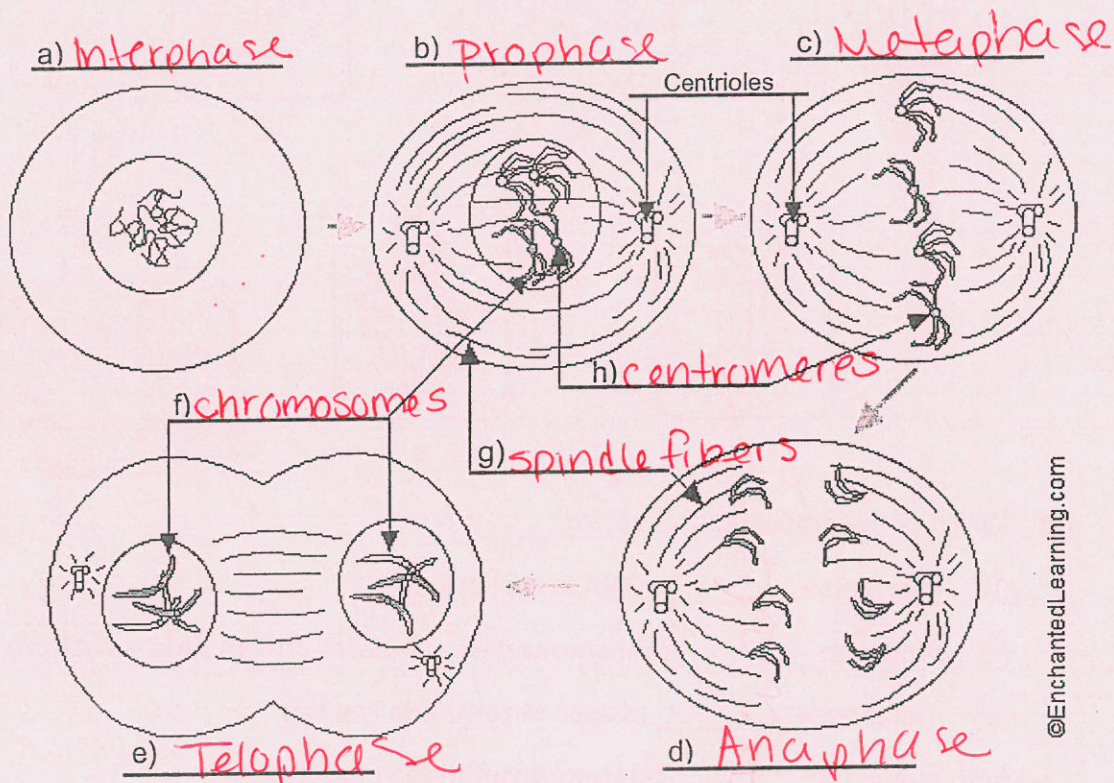
Mitosis Worksheet

Biology - pds1-305
 * answer key
 * please use to assist struggling students.

Name: KEY

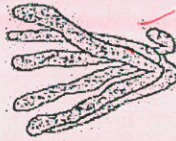
Date: _____

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.



2. During which stage of a cell's cycle do the replicated chromosomes thicken and become visible? prophase
3. During which stage of a cell's cycle do the replicated chromosomes line up on the equator of the cell? metaphase
4. During which stage of a cell's cycle do the chromosomes replicate? copy Interphase - S phase

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?

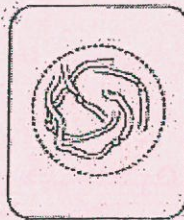


Anaphase

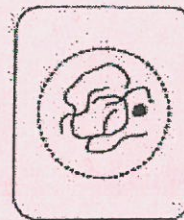
6. The drawings A-E show stages of mitosis in an animal cell.



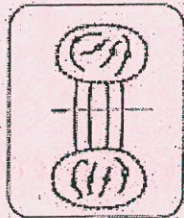
A



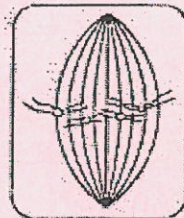
B



C



D



E

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

Growth of the cell and Copying of the DNA