

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_ Score out of 25 \_\_\_\_\_  
Corrected by \_\_\_\_\_

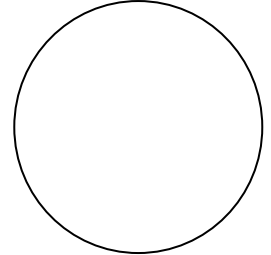
## Mitosis MicroViewer

Answer the following questions from the MicroViewer slides and the accompanying pamphlet.

The equatorial plate (in these slides) of one of the cells runs from \_\_\_\_\_ to \_\_\_\_\_ and the poles of cell run from \_\_\_\_\_ to \_\_\_\_\_.

**Slide 1:** This is a fertilized egg, called a \_\_\_\_\_ . The chromosomes are not seen well at this stage, because they are very thin.

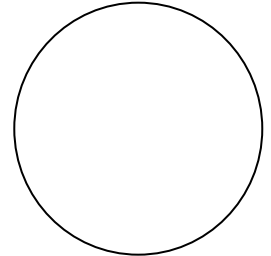
Draw this cell.



**Slide 2:** During prophase the chromosomes begin to \_\_\_\_\_ up. Which chromosomes did the sperm supply?

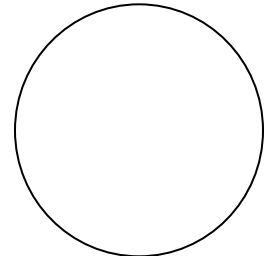
\_\_\_\_\_

Draw the prophase of the cell.



**Slide 3:** The chromosomes have moved to the center or the equatorial plate of the cell during this phase, called \_\_\_\_\_ .

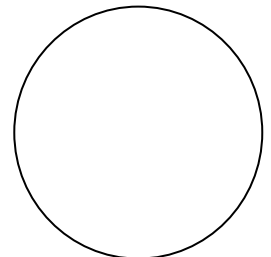
Draw this cell and be sure to include the spindle fibers that go from the centriole at P to each chromosome.



**Slide 4:** What is the difference between slide 3 and slide 4. Keep in mind they are both metaphase. (hint. meta = middle)

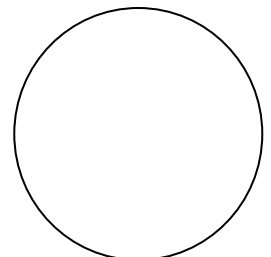
\_\_\_\_\_

Draw this slide.



**Slide 5:** In early anaphase each \_\_\_\_\_ has completed \_\_\_\_\_. They are also beginning to form two groups.

Draw the cell during early anaphase.



**Slide 6:** The eight chromosomes are now separated into \_\_\_\_\_ groups and each group has \_\_\_\_\_ chromosomes

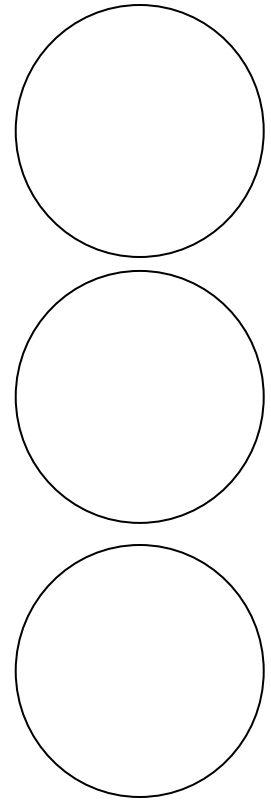
Draw the late anaphase of the cell.

**Slide 7:** In telophase the chromosomes have drawn completely apart and the cell is beginning to \_\_\_\_\_.

Draw telophase of the cell.

**Slide 8:** In late \_\_\_\_\_ the original \_\_\_\_\_ has divided to form two daughter cells. Soon the whole process will start over.

Draw the late telophase of the cell.



You have been looking at cells from an ascaris. Here is some information about the ascaris:

*Ascariasis is a human disease caused by the parasitic roundworm Ascaris lumbricoides. Perhaps as many as one quarter of the world's people are infected, and ascariasis is particularly prevalent in tropical regions and in areas of poor hygiene.*

*Infection occurs through ingestion of food contaminated with feces containing Ascaris eggs. The larvae hatch, burrow through the intestine, reach the lungs, and finally migrate up the respiratory tract. From there they are then reswallowed and mature in the intestine, growing up to 30 cm (12 in.) in length and anchoring themselves to the intestinal wall.*

*Infections are usually asymptomatic (without obvious symptoms), especially if the number of worms is small. They may however be accompanied by inflammation, fever, and diarrhea, and serious problems may develop if the worms migrate to other parts of the body.*

~ Wikipedia



Ascaris nematodes have \_\_\_\_\_ chromosomes compared to humans which have \_\_\_\_\_ chromosomes.