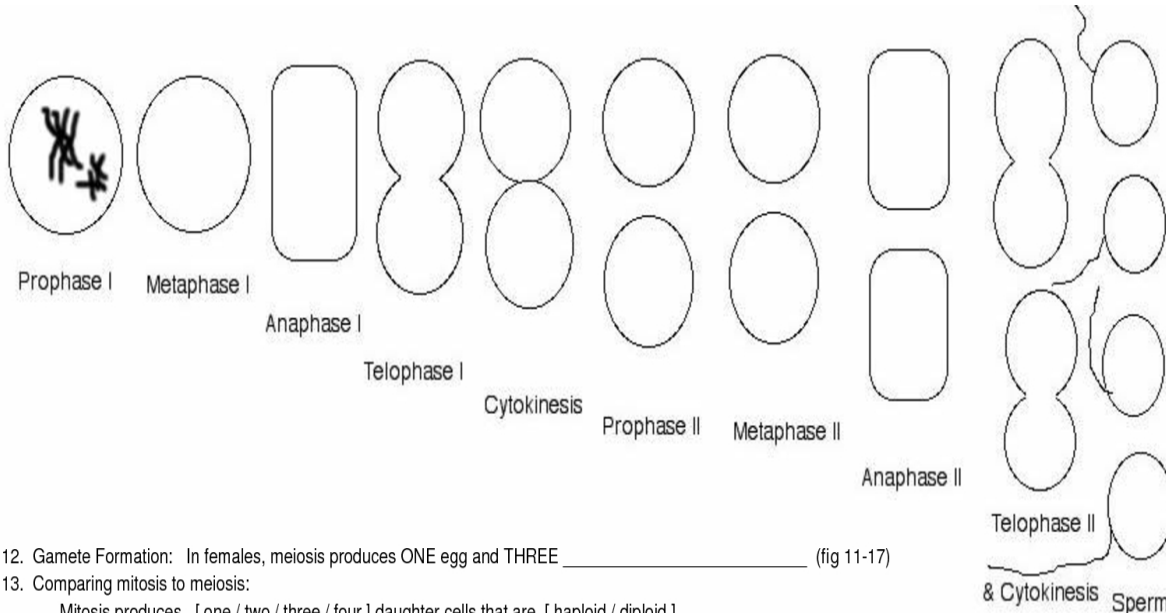


11-4 Meiosis

Name _____

- Genes are located on _____ in the cell nucleus.
- Mendel's principles require two things:
 Each organism must inherit a single copy of every gene from its _____
 When an organism produces its own _____, those sets must be separated.
- How many chromosomes does the body cell of a fruit fly have? _____
- A cell that contains both sets of homologous chromosomes is said to be _____
- When cells (like gametes) contain only a single set of chromosomes, it is said to be _____
- _____ is a process of reduction division in which the number of _____ per cell is cut in half through the separation of homologous chromosomes in a diploid cell.
- What are the two distinct divisions of meiosis? _____ and _____
- During prophase of meiosis, chromosomes pair up and form a _____
- When these pairs exchange portions of their chromatids, it is called _____
- At the end of meiosis II, how many daughter cells are produced? _____
- Draw your own chromosomes on the image below (prophase I is filled out for you, use Fig 11-15 as a guide)



- Gamete Formation: In females, meiosis produces ONE egg and THREE _____ (fig 11-17)
- Comparing mitosis to meiosis:
 Mitosis produces [one / two / three / four] daughter cells that are [haploid / diploid]
 Meiosis produces [one / two / three / four] daughter cells that are [haploid / diploid]