

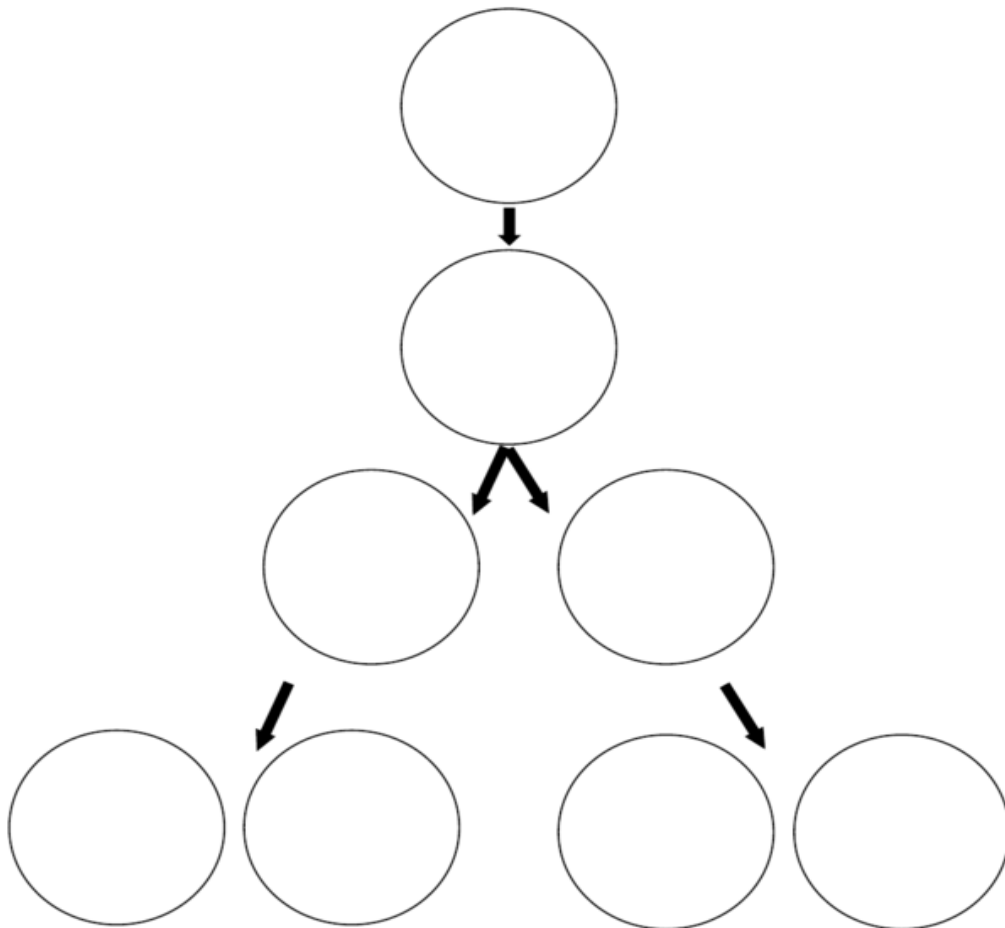
ACTIVITY 2

SEX LINKAGE AND RECOMBINATION

Directions: Using your understanding in the Lesson, illustrate the chromosomes on each circle of the diagram below (cell is $2n = 4$) ; one long green, one long red, one short black, one short white.

Draw out each step as you go through the process of meiosis with this cell.

1. Interphase I: Duplicate each chromosome. Use the safety pin to hold the duplicated chromosomes together.
2. Prophase I: Homologous chromosomes line up (long goes with long, short goes with short) and the nuclear membrane dissolves.
3. Metaphase I: Homologous chromosomes line up in the middle of the cell.
4. Anaphase I: Homologous chromosomes split to different sides of the cell.
5. Telophase I: Cytoplasm is divided and two new cells are created.
6. Metaphase II: Duplicated chromosomes line up in the middle of the cell
7. Anaphase II: Chromosomes split to different sides of the cell.
8. Telophase II: Cytoplasm is divided and now there are 4 new cells.



Source: <https://studylib.net/doc/8600599/crossing-over-and-independent-assortment-investigation>