Meiosis Section Review

Name: _____
Date: _____ Per: _____

USING KEY TERMS

1. Use each of the following terms in the same sentence: *meiosis* and *sex chromosomes*.

Meiosis is the process that produces Sex cells, each sex cell contains one sex chromosomes

In each of the following sentences, replace the incorrect term with the correct term from the word bank.

pedigree	homologous chromosomes
meiosis	mitosis

2. During ~~fertilization,~~ chromosomes are copied, and then the nucleus divides twice.

meiosis

3. A ~~Punnett square~~ is used to show how inherited traits move through a family.

Pedigree

4. During meiosis, ~~sex cells~~ line up in the middle of the cell.

homologous chromosomes

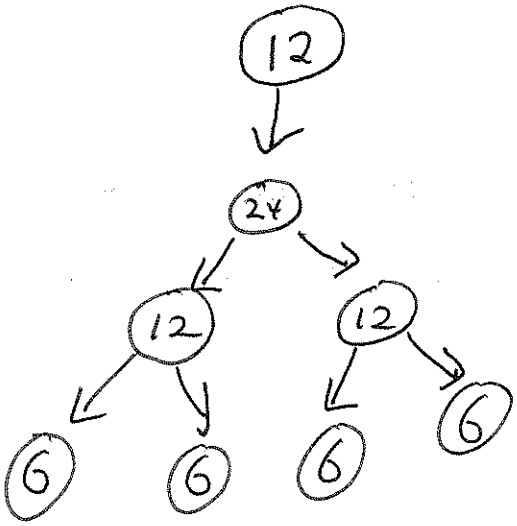
UNDERSTANDING KEY IDEAS

A 5. Genes are found on
   a. chromosomes.
   b. proteins.
   c. alleles.
   d. sex cells.

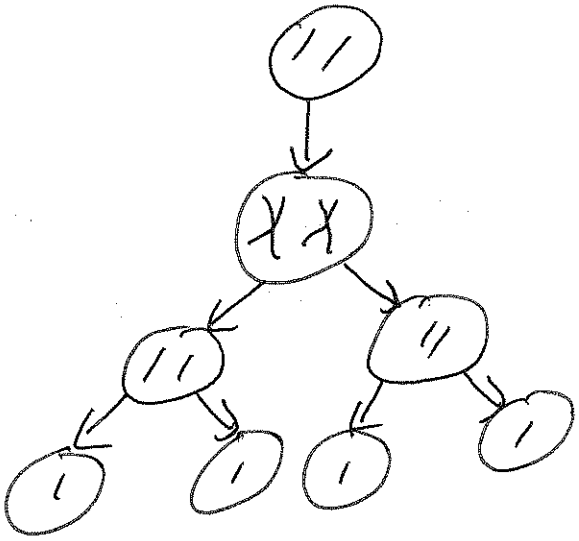
6. If there are 14 chromosomes in pea plant cells, how many chromosomes are present in a sex cell of a pea?

7

7. Draw the steps of meiosis. You may either draw each chromosome, or simply put number to represent the number of chromosomes in each cell.



or



8. What are two ways that mitosis and meiosis are similar?

both double the number of chromosomes, both line chromosomes in the middle and use spindle fibers to seperate them

9. What are two ways that mitosis is different from meiois?

mitosis creates genetically identical cells, meiosis creates unique sex cells, mitosis makes somatic or body cells meiosis creates germ or sex cells.

10. Put the following in order from smallest to largest: ***chromosome, gene*** and ***cell.***

gene → chromosome → cell

11. What sex chromosomes do you have? if you're male: XY
if you're female: XX

12. A pea plant has purple flowers. What alleles for flower color could the sex cells carry? F or f (but not both)