Name: _____

7.12 Genetics Reading Notes
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1. _____ is the passing of genetic material from parent to offspring.
2. Genetics is the study of how _____ are inherited.
3. Genes are made up of _____ and are located on _____. They are the _____ that express our traits.
4. In sexual reproduction, how much genetic material does each parent provide for the offspring?
5. How many chromosomes does each average human have? _____ You receive _____chromosomes from your mom and _____ from your dad.
6. The offspring will have two versions of each gene (one from mom, one from dad). These are called _____ and they determine the traits of living organisms.
7. There are two types of alleles: (Write the definitions in green)
   a. Dominant:_____
   b. Recessive:_____
8. When can dominant alleles contribute to the phenotype (what the organism looks like)?
9. When can recessive alleles contribute to the phenotype (what the organism looks like)?

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10. What did Gregor Mendel study and why is he considered the father of genetics?

11. A _____ is a way to describe how a trait is inherited across generations.

    a. _____ are males and _____ are females.

    b. Each generation is shown on a separate _____.

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12. A Punnett square is a diagram that can use use to calculate the _____ of gene outcomes in an offsprings for a certain trait.

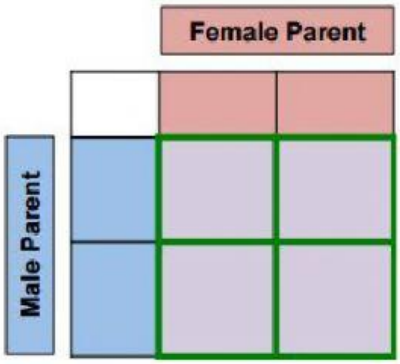
    a. One parent's genes are on the _____ row, the other parent's are down the left _____.

    b. _____ genes are shown with uppercase letters.

    c. Recessive genes are shown with _____ letters.

    d. Each square represents one possible _____ outcome.

Work the example in your book on Albinism. How many of the offspring will have albinism?



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13. When the cell divides, all of the DNA must be copied. Sometimes it's not copied correctly and a _____ occurs. The mutation will be included every time that cell divides.

14. Some mutations have _____ _____, some help offspring _____, and some are _____.