**10-2 & 10-3 Terms:**

allele chromosome map dihybrid dominant

F1 generation F2 generation gene linkage genetics

genetic recombination genotype Gregor Mendel heredity

heterozygous homozygous hybrid Law of Independent Assortment

Law of Segregation monohybrid P generation phenotype

Polyploidy Punnett square probability recessive

true breeding ♀ symbol ♂ symbol

**Mark which vocab works are from section 10-2 and from 10-3!**

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-alternative form that a single gene may have for a particular trait.

2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-Mendel’s name for a specific trait that appeared in the first generation. It is always expressed in the phenotype.

3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-new combination of genes produced by crossing over and independent assortment.

4.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-science of heredity.

5.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-an organism’s allele pairs. The genetic makeup of an organism.

6.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-organism with two different alleles for a specific trait.

7.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-organism with two of the same alleles for a specific trait.

8.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-term used to describe an organism that is heterozygous for a specific trait.

9.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-Mendelian law stating that a random distribution of alleles occurs during the formation of gametes.

10.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-Mendelian law stating that two alleles for each trait separate during meiosis.

11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- Passing of traits from parents to offspring

12.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-observable characteristic that is expressed as a result of an allele pair.

13.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-having one or more extra sets of all chromosomes, which, in polyploidy plants, can often result in greater size and better growth and survival.

14.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-Mendel’s name for a specific trait hidden or masked in the first generation. It is only expressed when paired with the same allele.

15. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- Self- pollinated for several generations for one particular character for an organism

16.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-a drawing the shows the sequence of genes on a chromosome. It is created by using crossover data.

17.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-a cross that involves a single trait.

18.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-a cross that involves two traits.

19. \_\_\_\_\_\_\_\_\_ is the symbol for males and \_\_\_\_\_\_\_\_\_\_\_\_\_ is the symbol for females

20.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-a diagram that depicts the possible offspring for genetic cross.

21.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-genes that are located close to each other may travel together during gamete formation.

22. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- Known as “Father of Modern Genetics”

23.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-Mendel’s pure-breeding generation.

24.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-Mendel’s first filial generation.

25.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-Mendel’s second filial generation.

26.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-the number of times an event is expected to happen divided by the number of times it could happen. (The likelihood that a particular event will occur.)