Mendelian Genetic Vocabulary

Gene - a section of DNA that is used to make a protein or codes for a trait	Allele - different forms of a gene for each variation of a trait of an organis	Phenotype- outward appearance of an organism, regardless of its genes
Chromosome Nucleosome QQQQ DNA	Trait Alleles	Genotype Phenotype
	Flower White Flowers,	FF Purple Flower
	Color Purple Flowers	Ff Purple Flower
JAND GROUP DE	Hair Curly Hair, Texture Straight Hair	ff White Flower
Exon Intron Exon Gene		
Genotype -combination of genes in an organism for a trait Ex. TT, Tt and tt	Homozygous- when there are two identical alleles for a trait TT and tt	Heterozygous- when there are two different alleles for a trait Tt
Trait - characteristic that is inherited; can be either dominant or recessive Ex. Flower Color	Dominant- observed trait of an organism that mask the recessive form of a trait Ex. Purple Flowers	Recessive - trait of an organism that can be masked by the dominant form of a trait Ex. White Flowers
Law of segregation- Mendelian principle explaining that the two alleles for each gene are separated when gametes are formed	Law of independent assortment-Mendelian principle stating that genes for different traits are inherited independently of each other	Heredity- passing on of characteristics from parents to offspring
Offspring- the product of reproduction, a baby organism	Gametes- haploid sex cells that contain half the genetic information $\boxed{Gametes}_{perm (n)} + \bigoplus_{Egg (n)} - \bigoplus_{Zygote (2n)}$	Left Right Left Right

For each statement circle YES if it is TRUE and **NO** if it is **FALSE**.

If you circled YES, circle AGREE and explain why the statement is true.

If you circled **NO**, also circle **DISAGREE** and explain why the statement is false.

1) An example of a <u>homozygous</u> genotype is two alleles for curly hair (HH). YES or **NO**

I (AGREE/ DISAGREE) because _____

2) A <u>phenotype</u> is a combination of alleles for a trait.

YES or NO

I (AGREE/ DISAGREE) because _____

3) A <u>gene</u> is the same as a characteristic.

YES or NO

I (AGREE/ DISAGREE) because _____

4) A trait is the different forms of a gene .

YES or NO

I (AGREE/ DISAGREE) because _____

5) An example of <u>heredity</u> is when two parents with curly hair have a child with curly hair.

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YES or NO

I (AGREE/ DISAGREE) because _____

6) A heterozygous organism demonstrates the <u>recessive</u> allele.

YES or NO

I (AGREE/ DISAGREE) because _____

6) Sperm is a <u>gamete</u> that contains all the parent's genetic information. YES or **NO**

I (AGREE/ DISAGREE) because _____