

### Knowledge Check 2 - PMA

Name: \_\_\_\_\_ Score: \_\_\_\_\_

II Unit – Date: \_\_\_\_\_ Code No. \_\_\_\_\_

Contents to evaluate: Mendel dominant and recessive, genetics vocabulary

#### Part 1(4 points each= 40 points)

**Instructions:** Choose the word that correctly completes the statement. Words may be repeated.

1. Brown eyes is a \_\_\_\_\_ trait over blue eyes.
2. Inside the \_\_\_\_\_ we can find DNA.
3. \_\_\_\_\_ traits will hide, and may only appear in the upcoming generation.
4. When two alleles are the same, the trait is \_\_\_\_\_.
5. The \_\_\_\_\_ for color of hair is BB.
6. \_\_\_\_\_ are different forms of a characteristic.
7. The letters or \_\_\_\_\_ can explain if a trait is dominant or recessive.
8. \_\_\_\_\_ traits will overcome \_\_\_\_\_ traits, like dark skin overcomes light skin.
9. \_\_\_\_\_ control your traits.
10. A \_\_\_\_\_ is also called hybrid.

DNA
GENES
TRAIT
ALLELLES
RECESSIVE
DOMINANT
GENETICS
HOMOZYGOUS
HETEROZYGOUS
PHENOTYPE
GENOTYPE
CHROMOSOMES
NUCLEUS

**Part 2 (3 points each= 15 points)**

**Instructions:** Choose the word that makes this statement incorrect. Replace it for the right word. Write only the word that makes the statement correct. You can use the vocabulary from the box.

1. Homozygous traits will create organisms that can inherit a recessive trait having in its phenotype a dominant trait.  
\_\_\_\_\_
2. Dominant traits hide in the background, and can only appear in homozygous state.  
\_\_\_\_\_
3. In the nucleus we can find genetics.  
\_\_\_\_\_
4. Two alleles used for one trait that are different (Bb) are homozygous.  
\_\_\_\_\_
5. The physical appearance of a trait is called a genotype.  
\_\_\_\_\_

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**Part 3 (3 points each= 45 points)**

**Instructions:** type what the offspring would look like for the given cross.

Genetics of Pea Plants							
Traits	Seed Shape	Seed Color	Seed Coat Color	Pod Shape	Pod Color	Flower Position	Stem Height
<b>Controlled by Dominant Allele</b>							
	Round	Yellow	Gray	Smooth	Green	Side	Tall
<b>Controlled by Recessive Allele</b>							
	Wrinkled	Green	White	Pinched	Yellow	End	Short

**Practice Example:****Trait: Seed Shape Dominant Allele = Round Recessive Allele = Wrinkled****Crosses:**

Round + Wrinkle = Round

Round + Round = Round

Wrinkled + Wrinkled = Wrinkled

**Seed Color**

Dominant =

Recessive =

Yellow + Green =

Green + Green =

Yellow + Yellow =

**Pod Color**

Dominant =

Recessive =

Yellow + Yellow =

Green + Yellow =

Green + Green =

**Pod Shape**

Dominant =

Recessive =

Smooth + Pinched =

Pinched + Pinched =

Smooth + Smooth =