

### 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  
ALLELES  
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
Controlled by Dominant Allele	 Round	 Yellow	 Gray	 Smooth	 Green	 Side	 Tall
Controlled by Recessive Allele	 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 =