Colegio Metropolitano
Sixth grade ENCINO PINO SAUCE
Science
Miss Alisson Coronado

Knowledge Check 2

Name: _____ Score: _____

II Unit – Date: _____Code No. _____

Contents to evaluate: Mendel dominant and recessive, genetics vocabulary

Part I (4 point each=40 points)
Instructions: Use the words on the box to complete the definitions below.

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

1. Two alleles used for one trait that are different (Bb) are _____.
2. _____ are factors that control a trait you exhibit.
3. The different forms of a characteristic are _____.
4. The physical appearance of a trait is called a _____.
5. The _____ trait overshadows the other and is expressed.
6. The letters that represent the different forms of a gene is the _____.
7. Two alleles/letters for one trait that are the same (BB) are _____.
8. The combination of alleles or letters is the _____ of an organism.
9. The _____ trait that hides in the background (lower case).
10. In the _____ we can find DNA.

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Part 2 (3 point each=60 points)
Instructions: Use the above chart to answer the following answers.

The letter used is traditionally the first letter of the dominant trait. Both the dominant and recessive alleles for each trait are the same letter. The dominant is capital, the recessive is lower case.

Trait	Dominant	Symbol	Recessive	Symbol
Seed shape	Round		wrinkled	
Seed color	Yellow		green	
Pod shape	Smooth		constricted	
pod color	Green		yellow	
Flower Position	Axial		Terminal	
Plant Height	Tall		Short	

Genotype – the pair of alleles that make up a gene.
Types (Homo = same, hetero= different)
Homozygous dominant = both alleles are dominant (both capital letters)
Homozygous recessive = both alleles are recessive (both lower case)
Heterozygous = one of each (one capital, one recessive)

Give the genotype for each gene.

1. Homozygous dominant seed shape

2. Homozygous dominant plant height

3. Homozygous recessive seed color

4. Homozygous recessive pod color

5. Heterozygous seed shape

6. Heterozygous pod color

7. Homozygous dominant pod shape

8. Heterozygous pod shape

9. Homozygous recessive pod color

10. Heterozygous plant height

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Phenotype – the resulting characteristic of the organism

When alleles are either dominant or recessive – only the dominant trait is expressed (shows up).

If the genotype is RR the phenotype is round (both alleles are dominant)

If the genotype is Rr, the phenotype is round (one is dominant, one is recessive so the dominant shows up)

If the genotype is rr, the phenotype is wrinkled. (both are recessive so the recessive shows up)

Give the PHENOTYPES for the previous genotypes.

1. Homozygous dominant seed shape

2. Homozygous dominant plant height

3. Homozygous recessive seed color

4. Homozygous recessive pod color

5. Heterozygous seed shape

6. Heterozygous pod color

7. Homozygous dominant pod shape

8. Heterozygous pod shape

9. Homozygous recessive pod color

10. Heterozygous plant height

LIVEWORKSHEETS