

Genetics: Genes to Traits

Matching:

Genotype	Alleles	Heredity	Genes	Mendelian Traits	Multifactorial Trait
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1. _____ – copies of each gene that parents pass on to their children
2. _____ – simple traits that are governed by a single gene
3. _____ – the process by which parents pass on their genetic information to their offspring
4. _____ – a trait that is controlled by many different forms of many different genes plus environmental influences
5. _____ – combination of genes and alleles
6. _____ – discrete units of information that make proteins; organized into chromosomes

Multiple Choice:

1. How many copies of a gene does a child get from their parents?
 - a. 4, two from each parent
 - b. 2, one from each parent
 - c. 6, three from each parent
2. What are centromeres made for?
 - a. Chromosome separation during cell division
 - b. Duplication during cellular respiration
 - c. Multiplication of neuron
3. What three features do scientists use to identify similarities and differences in chromosomes?
 - a. Height, weight, and age
 - b. Size, banding pattern, and centromere position
 - c. Similarities, differences, and unique characteristics
4. What kind of trait is height and cancers?
 - a. Individual Traits
 - b. Basic Traits
 - c. Multifactorial Traits
5. Why is it important to study heredity?
 - a. It allows us to understand basic core parts of biology
 - b. We will be tested on it
 - c. It helps us to understand character flaws