

Name: _____

Date: _____

DNA Quiz

Multiple Choice: Choose the correct answer from the option given.

1. The smallest unit that can live on its own and the building block of all living things is known as
a. genes b. alleles c. cells d. chromosomes
2. _____ is made up of hereditary material.
a. chromosomes b. DNA c. alleles d. Punnett square
3. Most DNA can be found in the _____.
a. cell wall b. ribosomes c. nucleus d. mitochondria
4. _____ is a unit of heredity which is transferred from a parent to offspring and is held to determine some characteristic of the offspring.
a. Gene b. DNA c. Punnett Square d. heredity
5. _____ is a threadlike structure of nucleic acids and protein found in the nucleus of most living cells, carrying genetic information in the form of genes.
a. Gene b. chromosomes c. phenotype d. alleles
6. You have _____ pairs of chromosomes.
a. 23 b. 46 c. 24 d. 47
7. Males have _____ chromosomes.
a. XX b. XY c. XZ d. YY
8. Females have _____ chromosomes.
a. XX b. XY c. XZ d. YY
9. _____ Are one of two or more alternative forms of a gene that arise by mutation and are found at the same place on a chromosome.
a. Alleles b. chromosomes c. genes d. genotype
10. _____ is a distinguishing quality or characteristic, typically one belonging to a person.
a. Allele b. genotype c. trait d. phenotype

Short answers: answer the following in complete sentences.

11. How many chromosomes do you get from your mom and how many do you get from your dad?

12. What are the two types of alleles we discussed in class? What do we use to represent alleles?

13. If a child has Bb alleles, being that brown is the recessive eye color and blue is the dominant eye color, what eye color would the child have?

14. Complete the Punnett Square to represent the information below.

Mom has Bb – black hair

Dad has bb – brown hair
