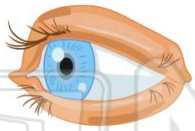
Genetics and heredity II

BIO

Name_____ Class_____ Date_____

1 When one of **two traits** can be inherited **without** the other, the genes for these traits are said to be



A dominant
B recessive
C blended
D independent

2 In sexually reproducing species, the number of chromosomes in **each body cell** remains the **same** from one generation to the next as a direct result of

A meiosis and fertilization
B mitosis and mutation
C differentiation and aging
D homeostasis and dynamic equilibrium

3 In which process is the pairing of **homologous chromosomes** followed by the **disjunction** of these chromosome pairs?

A binary fission
B budding

4 What are the **normal chromosome numbers** of a sperm, egg, and zygote, respectively?

A monoploid, monoploid, and monoploid
B monoploid, diploid

5

7

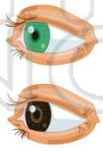
C messenger RNA molecule
D DNA molecule

C a large population
D mutations

9 Genes are **inherited**, but their expressions can be **modified** by the environment. This statement explains **why**

A some animals have dark fur only when the temperature is within a certain range
B offspring produced by means of sexual reproduction look exactly like their parents
C identical twins who grow up in different homes have the same characteristics
D animals can be cloned, but plants cannot

10 The great variety of possible gene combinations in a **sexually** reproducing species is due in part to the



A sorting of genes as a result of gene replication
B pairing of genes as a result of mitosis
C pairing of genes as a result of differentiation
D sorting of genes as a result of meiosis

Genetics and heredity II - Answer Key

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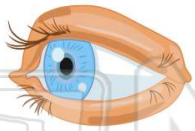

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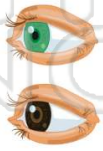

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