



Name _____ Class _____ Date _____

1

Gregor Mendel developed heredity principles from his



- A mathematical analysis of the results of pea plant crosses
- B working model of the structure of DNA
- C mapping of the locations of human genes on chromosomes
- D extensive study of breeding *Drosophila*

2

A cross between two mice with long tails and brown fur produced the **four types** of offspring listed below:

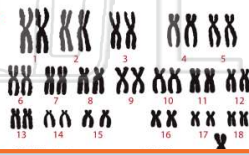
long tailed with brown fur – long tailed with white fur
short tailed with brown fur – short tailed with white fur

Which best explains the results of this cross?

- A intermediate inheritance
- B gene linkage
- C independent assortment
- D crossing-over

3

The **chromosomes** of a person with a **genetic disorder** are shown in the diagram.



4

Which **genotype** illustrates codominance of alleles that control **blood type** in humans?

- A ii
- B I^Ai



5



PREVIEW

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7

- B loss of a nucleolus
- C loss of a nucleolus
- D replication of centromeres



- A Tay-Sachs disease
- B sickle-cell anemia
- C PKU
- D Down syndrome



9

Meiosis and **fertilization** are important processes because they may most immediately result in

- A many body cells
- B immune responses
- C genetic variation
- D natural selection



10

The **instructions** for the traits of an organism are **coded** in the arrangement of

- A glucose units in carbohydrate molecules
- B bases in DNA in the nucleus
- C fat molecules in the cell membrane
- D energy-rich bonds in starch molecules



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D

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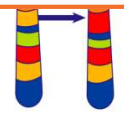
D

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