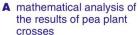


Genetics and heredity I

Class Name Date



Gregor Mendel developed heredity principles from his





- c mapping of the locations of human genes on chromosomes
- D extensive study of breeding Drosophila



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

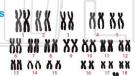
long tailed with brown fur - long tailed with white fur short tailed with brown fur - short tailed with white fur

Which best explains the results of this cross?

- inheritance B gene linkage
- **C** independent assortment
- D crossing-over



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





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











PREVIEW



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



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





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



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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



Genetics and heredity I - Answer Key

BIO

Name Class Date A cross between two mice with long tails and Gregor Mendel developed heredity principles from his brown fur produced the four types of offspring listed below: A mathematical analysis of long tailed with brown fur - long tailed with white fur the results of pea plant short tailed with brown fur - short tailed with white fur A Which best explains the results of this cross? B working model of the structure of DNA C mapping of the locations of human genes **C** independent on chromosomes inheritance assortment B gene linkage D crossing-over D extensive study of breeding Drosophila Which genotype illustrates codominance of The chromosomes XX XX XX XX XX 3 alleles that control blood type in humans? of a person with a genetic disorder KK KK KK KK KK KK KK are shown in the A ii diagram. 88 88 88 XX XX KK B IAi B 5 D **PREVIEW** Please Sign In or Sign Up to download the printable version of this worksheet C A Tay-Sachs disease C loss of a nucleolus B sickle-cell anemia SODA **D** replication of centromeres C PKU **D** Down syndrome Meiosis and fertilization are important The instructions for the traits of an 10 processes because they may most organism are coded in the arrangement of immediately result in A glucose units in carbohydrate molecules A many body cells B bases in DNA in the nucleus B **B** immune responses c fat molecules in the cell membrane C genetic variation D energy-rich bonds in starch molecules D natural selection