



ANEXO NASHVILLE SCHOOL

SCIENCE 7th GRADE

MRS FIGUEROA

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Guide from the information given and answer the following questions

1. What is probability?
2. Explain the difference between genotype and phenotype.
3. Now you know that phenotype and genotype are terms that describe?
4. How are the symbols written for alleles that share incomplete dominance?
5. How is polygenic inheritance different from the patterns described by Mendel?
6. Give one example of how environmental factors affect gene expression.
7. Describe the concepts: codominance, incomplete dominance, polygenic inheritance.
8. Describe how genes and DNA can be distributed in MEIOSIS.
9. What is a Nitrogen Base.
10. describe the concepts, DNA, RNA, GENES AND CHROMOSOMES.
11. The structure of proteins, are made of?
12. The role of RNA in our cells?

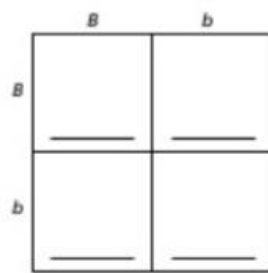
Genetics: The Science of Heredity • *Review and Reinforce*

Probability and Heredity

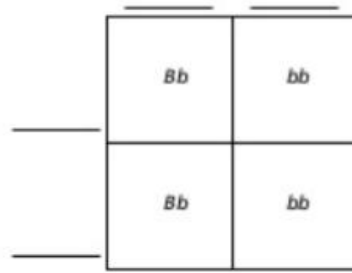
Understanding Main Ideas

Complete the two Punnett squares below, and then answer the questions on a separate sheet of paper.

1. Punnett Square A:



2. Punnett Square B:



3. In the cross between two black guinea pigs shown in Punnett Square A, what is the probability that an offspring will be black? White?
4. Is it possible that the cross between two black guinea pigs in Punnett Square A would not produce a white guinea pig? Explain.
5. What color are the guinea pig parents in the cross shown in Punnett Square B?
6. Which guinea pig parent(s) in Punnett Square B is homozygous? Which is heterozygous? Explain how you know.
7. Calculate the probability that an offspring will be black in the cross in Punnett Square B. What is the probability that an offspring will be white?

Building Vocabulary

Match each term with its definition by writing the letter of the correct definition on the line beside the term.

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|-------------------------|-----------------------------------------------------------------------------------------------------|
| _____ 8. heterozygous | a. a chart that shows all the possible combinations of alleles that can result from a genetic cross |
| _____ 9. Punnett square | b. a number that describes how likely it is that an event will occur |
| _____ 10. genotype | c. an organism that has two identical alleles for a trait |
| _____ 11. codominance | d. an organism's physical appearance |
| _____ 12. probability | e. an organism's genetic makeup, or allele combinations |
| _____ 13. homozygous | f. an organism that has two different alleles for a trait |
| _____ 14. phenotype | g. inheritance pattern in which the alleles are neither dominant nor recessive |