

Modern Genetics ▪ *Review and Reinforce*

Human Inheritance

Understanding Main Ideas

Fill in the Punnett squares for dimples, a trait controlled by a dominant allele (A), and colorblindness, a trait controlled by a recessive sex-linked allele (B). Then answer the questions that follow. (The father's alleles are written across the top of the Punnett square. The mother's alleles are written on the left side.)

A: Dimples

	<i>D</i>	<i>d</i>
<i>d</i>	1. _____	2. _____
<i>d</i>	3. _____	4. _____

- Does either the mother or the father in A have dimples?

- What percentage of children are likely to have dimples?

B: Colorblindness

	X^c	Y
X^C	7. _____	8. _____
X^c	9. _____	10. _____

- Is either the mother or father in B colorblind?

- What percentage of female children are likely to be colorblind?

- What percentage of male children are likely to be colorblind?

Building Vocabulary

Fill in the blank to complete each statement.

- Three or more forms of a gene that code for a single trait are called _____.
- _____ have alleles that are passed from parent to child on a sex chromosome.
- A(n) _____ is a person who has one recessive allele for a trait and one dominant allele for the same trait.
- _____ carry genes that determine whether a person is male or female.