

**Modern Genetics** ▪ 6.1 Review and Reinforce**Human Inheritance****Understanding Main Ideas**

Fill in the Punnett squares for (A) dimples, a trait controlled by a dominant allele, and (B) colorblindness, a trait controlled by a recessive sex-linked allele.

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.)

5. Does either the mother or the father in A have dimples?

\_\_\_\_\_

6. What percentage of children are likely to have dimples?

\_\_\_\_\_

**A: Dimples**

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

**B: Colorblindness**

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

11. Is either the mother or father in B colorblind?

\_\_\_\_\_

12. What percentage of female children are likely to be colorblind?

\_\_\_\_\_

13. What percentage of male children are likely to be colorblind?

\_\_\_\_\_

**Building Vocabulary**

Fill in the blank to complete each statement.

14. A gene that has three or more forms that code for a single trait has \_\_\_\_\_ alleles.
15. \_\_\_\_\_ have alleles that are passed from parent to child on a sex chromosome.
16. A(n) \_\_\_\_\_ is a person who has one recessive allele for a trait and one dominant allele for the same trait.
17. \_\_\_\_\_ carry genes that determine whether a person is male or female.