



Worksheet

16

Dihybrid Cross

Reteaching Skills

Use with Chapter 10, Section 10.1

1. Describe the P_1 dihybrid cross shown in the transparency.

2. Describe the F_1 dihybrid cross shown in the transparency.

3. Identify the combinations of alleles that are contained in the gametes of the F_1 plants.

4. Complete the Punnett square for the F_2 generation. Each box should contain four alleles, two for each gene. One allele for each gene came from the female parent. The other allele for each gene came from the male parent. Each box should also identify the phenotype of each offspring. How many *different* genotypes are there in your completed square? Identify them.

5. What are the proportions of the different genotypes of the F_2 generation?

6. What are the phenotypic proportions?

7. In studying the dihybrid crosses, Mendel found that the inheritance of one trait does not influence the inheritance of another trait. What would be another way of expressing this fact, using the phenotypes of the F_2 generation on the transparency?
