

Name _____

Date _____

Incomplete, Codominance, Multiple Alleles

Chapter 11

Incomplete

Sponge Bob loves growing flowers for his pal Sandy. Her favorite flowers, Poofkins, are found in red, blue, and purple. Use the information provided and your knowledge of incomplete dominance to complete the following questions.

1. Write the correct genotype for each color if R represents a red gene and B represents a blue gene.

Red _____ Blue _____ Purple _____

2. What would happen if SpongeBob crossed a Poofkin with red flowers with a Poofkin with blue flowers. Complete the Punnett square to determine the chances of each flower color.

- a. Give the genotypes and phenotypes for the offspring.
- b. How many of the plants would have red flowers? _____ %
- c. How many of the plants would have purple flowers? _____ %
- d. How many of the plants would have blue flowers? _____ %

Codominance

Use the information provided and your knowledge of codominance to complete the following questions.

1. Write the correct genotype for each color if R represents a red gene and W represents a white gene, in cattle.

Red _____ Roan _____ White _____

2. Predict the genotypes and phenotypes of offspring when a homozygous white cow is crossed with a roan bull.

Genotype

RR # _____ % _____

RW # _____ % _____

WW # _____ % _____

Phenotype

Red # _____ % _____

Roan # _____ % _____

White # _____ % _____

Multiple Alleles

In blood groups A type and B type are codominant, and A type and B type are both dominant to O type.

- List the combination of Alleles for each blood group.

Blood group alleles	
Blood Groups	Combination of alleles
A	
B	
AB	
O	

- Mrs. Jones has the genotype AO for blood group. Mr. Jones has the genotype BB. Predict the possible blood groups of their children.

- Blood groups _____ , _____
