## **Module 8 Test Review**

Know these terms:

Allele Polygenetic inheritance

Genotype Incomplete dominance

Phenotype Epistasis

Homozygous Pleiotropy

Heterozygous Codominance

Dominant allele Rh factor

Recessive allele Autosomal inheritance

Pedigree Sex-linked inheritance

Monohybrid cross Allele mutation

Dihybrid cross Changes in chromosome structure

Autosomes Changes in chromosome number

Sex chromosomes Genetic disease carrier

Know the four principals of genetics

Be able to determine genotypes from a pedigree chart

Complete Punnett squares for a:

monohybrid cross dihybrid cross sex-linked cross

blood type and Rh-factor crosses

Know several genetic disorders by name

Understand the different types of chromosome mutations: deletion, duplication, inversion, insertion, translocation

Honors: The Circulatory System

1. Cross a heterozygous black mouse with a white mouse

KEY

B = black

b = white

R = round ears

r = pointed ears

2. Cross two heterozygous black mice

## **Dihybrid Cross Practice**

3. Cross a homozygous black mouse who has round ears (heterozygous) with a white mouse with round ears (heterozygous).

Parent Mice	Mouse #1	Mouse #2
Genotype		
Allele combinations		

Offspring Mice

Genotype	Fraction

Phenotype	Fraction

4. Cross two heterozygous black mice with round ears (heterozygous).

Parent Mice	Mouse #1	Mouse #2
Genotype		
Allele combinations		

Offspring Mice

Genotype	Fraction

Phenotype	Fraction

5. Cross a red-eyed female (homozygous) with a red-eyed male.

R = red eyesr = white eyes

Female parent genotype: X X Male parent genotype: X Y

Female offspring:

remaie offspring.	
Genotype	Fraction
Phenotype	Fraction

Genotype	Fraction
Phenotype	Fraction
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6. Cross a red-eyed female (heterozygous) with a white-eyed male.

Female parent genotype: X X Male parent genotype: X Y

Female offspring:

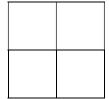
Genotype	Fraction
Phenotype	Fraction

Genotype	Fraction
Phenotype	Fraction

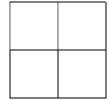
## Blood Types

7. Cross someone with B+ (BO+-) with someone with A+ (AA+-).

Blood type cross



Rh-factor cross



Phenotypes(%):

Phenotypes (%):