

PUNNETT SQUARE Webquest

Name _____

Science

Date _____ Class # _____

PART I

VOCABULARY TO KNOW: <http://www.kumc.edu/gec/glossnew.html>

Dominant allele-

Recessive allele-

Dominance-

Codominance-

Incomplete dominance-

Genotype-

Phenotype-

<http://www2.edc.org/weblabs/IncompleteDom/incompletedominance.html>

to perform the following activities that teach about Dominance, Incomplete Dominance and Codominance. Then, answer the questions below in complete sentences.

1. What is the allele for purple flowers? _____
2. What is the allele for white flowers? _____
3. What is the appearance (color, phenotype) of the following allele combinations?

PP = _____

Pp = _____

pp = _____

PART II on back

PART II

VOCABULARY TO KNOW: <http://www.kumc.edu/gec/glossnew.html>

Homozygous-

Heterozygous-

Genotype-

Phenotype-

Go to <http://www2.edc.org/weblabs/Punnett/punnettsquares.html> to perform the following activities using Punnett Squares. Read each page carefully. Answer the following questions as you go along.

1. A. What percentage would you expect to be BROWN CHICKS? _____
 B. What percentage would be HYBRID BROWN? _____

2. A. What percentage of the lemmings would be carriers (hybrid)? _____
 B. How many of the four offspring lemmings would be albino? _____
 C. What is the genotype of the albino offspring? _____

2. Write down the alleles for the lemming traits of...
 - a. Long tail= _____
 - b. Short tail = _____
 - c. Brown = _____
 - d. Albino = _____

3. Which two lemmings created the albino baby?
 - a. What are their numbers? _____ and _____
 - b. What are their genotypes? _____ and _____

Genetics and Heredity Webquest

1. There are 3 websites listed here.
2. For each link, there are questions and directions below.

Link #1 – Virtual Genetics Punnett Squares

http://www.mhhe.com/biosci/genbio/virtual_labs/BL_05/BL_05.html

1. Read through Objectives and Instructions on the left. It's very important that you read these before beginning.
2. Click on the TV for a review of how punnett squares work.
3. Click on the notebook on the table to complete genetics crosses. After you complete each cross, record your results in the data table below. Hit Reset for the next problem in the set. There are 10 problems total you need to do 5.

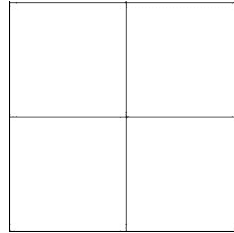
Scenario Number	Genotype of Parent 1	Genotype of Parent 2	% Homozygous and Heterozygous	% Phenotype

Link #2 – Punnett Squares

<http://www2.edc.org/weblabs/Punnett/punnettsquares.html>

1. Read the description of the problem and the review of the punnett square.
2. Click **continue** to get your first question. The answer: _____
3. Fill in the lemming punnett square on the screen and below:

4. Answer the question about albino gene carriers. The answer: _____
5. Which two lemmings will you choose to cross? _____ x _____
6. Show the punnett square for this cross:



Link #3 – Inheritance Practice Quiz

1. Click to enter the site - <http://anthro.palomar.edu/practice/mendqui2.htm>
2. Answer each question. Record the correct answer, an explanation and your work here:

Question	Answer	Explanation
1		
2		
3		
4		
5		
6		