

Name _____

Date _____ Per. _____

Word Problems Using Punnett Squares

	B	B
b	Bb	Bb
b	Bb	Bb

1

	B	B
B	BB	BB
b	Bb	Bb

2

	B	b
B	BB	Bb
b	Bb	bb

3

	B	b
b	Bb	bb
b	Bb	bb

4

B = Black

b = White

A black mouse was crossed with a white mouse. The results were 250 black mice and 125 white mice for offspring.

Which Punnett square best shows the two parents? 4

A black mouse was crossed with a black mouse. The results were 302 black mice and 111 white mice for offspring.

Which Punnett square best shows the two parents? 3

A black mouse was crossed with a white mouse. The results were 408 black mice and zero white mice for offspring.

Which Punnett square best shows the two parents? 1

A black mouse was crossed with a black mouse. The results were 206 black mice and zero white mice for offspring.

Which Punnett square best shows the two parents? 2

Use: **B = Black fur** **b = White fur** (Answer questions 1-6)

1. Which color is dominant, black or white? Black
2. Write a PURE gene pair. BB or bb
3. What is the PHENOTYPE of Bb? Black
4. What is the GENOTYPE of bb? Pure recessive
5. Write the GENE PAIR for hybrid black fur. Bb
6. Can hybrid white fur be written as a gene pair? Yes or no? No

Complete a Punnett square and answer the following questions. (Incomplete Dominance)

Use: **RR = Red flowers** **WW = White flowers** **RW = Pink flowers**

Cross a male white plant with a female pink plant.

	W	W
R	RW	RW
W	WW	WW

1. How many pure red offspring are there? 0
2. How many white offspring are there? 2/4
3. What fraction of offspring will be pink? 2/4
4. If there were 100 offspring produced as a result of this cross, how many of them would you predict would be white? 50/100