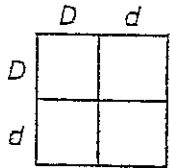


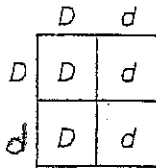
Punnett Square Worksheet

Name _____ Date _____ Class _____

1. Examine the diagrams below. Each is a step in the Punnett square method. Put the steps in order by writing the numbers 1 to 4 below them on the correct blanks.



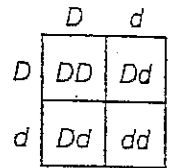
2



3



1



4

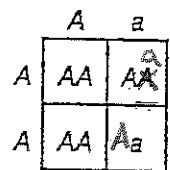
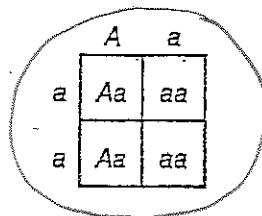
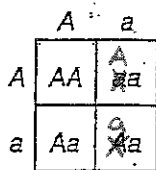
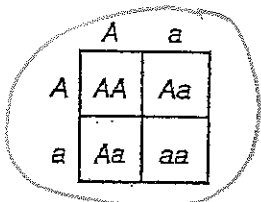
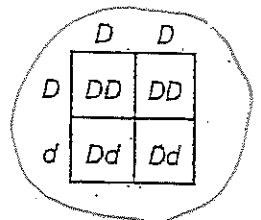
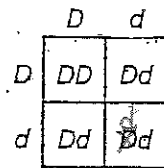
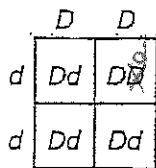
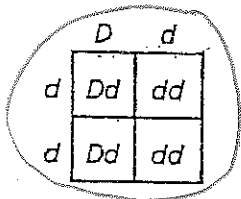
2. What do the letters outside the Punnett square stand for? _____

Gene pairs of parents for a specific trait

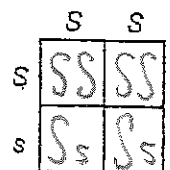
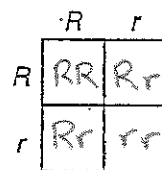
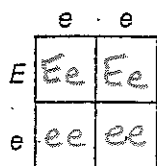
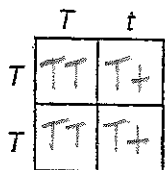
What do the letters inside each box stand for? _____

Possible gene pairs of offspring for that specific trait

3. Examine the following Punnett squares and circle those that are correct.



4. Complete the following to determine the expected offspring.



5. In corn plants, normal height H is dominant to short height h . Complete these four Punnett squares showing different crosses. Then, shade red all the pure dominant offspring. Shade green all the heterozygous offspring. Leave all the pure recessive offspring unshaded. (Genotype)

	H	H
h	Hh	Hh
h	Hh	Hh

	H	h
H	HH	Hh
H	HH	Hh

	H	h
H	HH	Hh
h	Hh	hh

	H	h
h	Hh	hh
h	Hh	hh

6. In flies, long wings L are dominant to short wings l . Complete these four Punnett squares showing different crosses. Then, shade red all the offspring that will have long wings. Leave all the shortwinged offspring unshaded. (Phenotype)

	L	L
l	Ll	Ll
l	Ll	Ll

	L	l
L	LL	Ll
l	Ll	ll

	l	l
l	ll	ll
l	ll	ll

	L	l
l	Ll	ll
l	Ll	ll

7. In guinea pigs, short hair H is dominant to long hair h . Complete the following Punnett squares according to the directions given. Then, fill in the blanks beside each Punnett square with the correct numbers.

- a. One guinea pig is Hh and one is hh

	H	h
h	Hh	hh
h	Hh	hh

Offspring expected (number)

$\frac{2}{4}$ Short hair

$\frac{2}{4}$ Long hair

- b. Both guinea pigs are heterozygous for short hair.

(hybrid)

	H	h
H	HH	Hh
h	Hh	hh

Offspring expected (number)

$\frac{3}{4}$ Short hair

$\frac{1}{4}$ Long hair