

Name _____ Date _____ Class _____

EXPECTED AND OBSERVED RESULTS

7. 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.

	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

8. 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.

	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

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

	S	S
s	Ss	Ss
s	Ss	Ss

Offspring expected (number)

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

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

b. Both guinea pigs are heterozygous for short hair.

	S	S
S	SS	Ss
s	Ss	ss

Offspring expected (number)

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

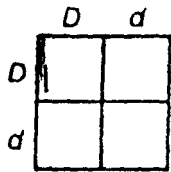
$\frac{1}{4}$ Long hair

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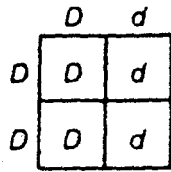
EXPECTED AND OBSERVED RESULTS

In Section 26:2 of your textbook, read about solving genetics problems using the Punnett square.

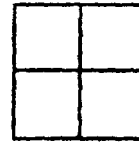
3. Examine the diagrams below. Each is a step in the Punnett square method. Put the steps in order by writing the numbers 1 to 4 below them on the correct blanks.



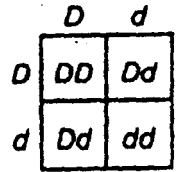
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3



1

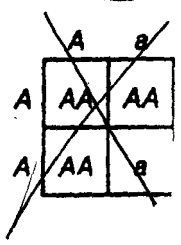
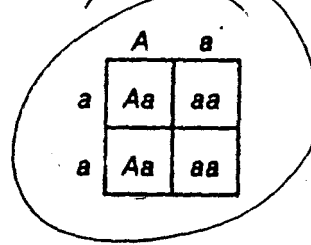
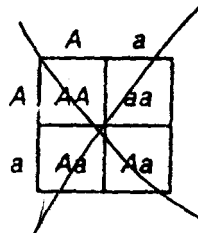
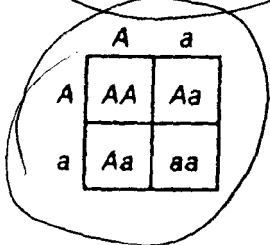
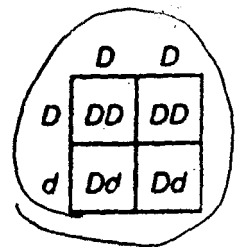
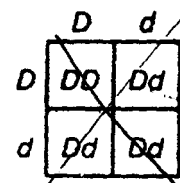
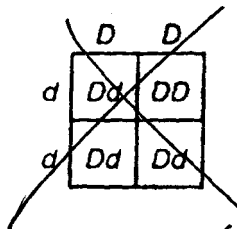
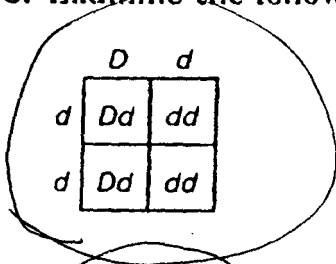


4

4. What do the letters outside the Punnett square stand for? Parental Genotypes

What do the letters inside each box stand for? Offspring Genotypes

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



6. Complete the following to determine the expected offspring.

