

TASK CARDS

In a species of flower, red (R) is dominant to white (r). If two plants heterozygous for red petals are crossed, what are the possible genotypes of the offspring?

- a. Rr only
- b. RR, rr only
- c. Rr, rr only
- d. RR, Rr, and rr



1

Sam has two pet rabbits with gray fur. When her rabbits mated, one of their four offspring had white fur. The other three had gray fur. Which of the following conclusions is most likely true about the genotypes of Sam's rabbits?

- a. gg, gg
- b. GG, GG
- c. Gg, Gg
- d. GG, Gg



2

In a breed of dogs, long hair (L) is dominant to short hair (l). Based on the Punnett square, offspring with long hair is indicated in which box or boxes?



	L	l
L	1	2
l	3	4

3

In corn plants, tall (T) is dominant to short (t). What are the chances of two heterozygous tall plants producing short offspring?

- a. one in four
- b. two in four
- c. three in four
- d. four in four



4

Sam has two pet rabbits with gray fur. When her rabbits mated, one of their four offspring had white fur. The other three had gray fur. Which of the following conclusions is most likely true about the genotypes of Sam's rabbits?

- a. gg, gg
- b. GG, GG
- c. Gg, Gg
- d. GG, Gg



2

is dominant to
chances of two
producing



punnett squares

Thank you for your purchase! I sincerely appreciate you spending your hard-earned money on the resources I create. Please remember to leave feedback to earn TpT Credits, which can be used toward future purchases.

Follow me on TpT to be notified when new products are added. All new products are 50% off for the first 20 buyers! Follow me on the social media links on the left, too!

- Tammy Morehouse

YOU MAY

- Use this item for personal or student use in a single classroom.
- Purchase additional licenses at a discount for others to use this resource.
- Check back for updated versions.

YOU MAY NOT

- Copy this item for use by others.
- Post this item or any copy for sale or for free.
- Post this item on a website for download, including personal or district websites without written permission.

©Tammy Morehouse

All rights reserved. Purchase of this unit entitles the purchaser the right to reproduce the pages in limited quantities *for single classroom use only*. Duplication for an entire school, an entire school system or commercial purposes is strictly forbidden without written permission from the publisher.

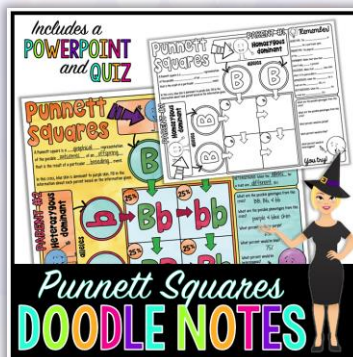
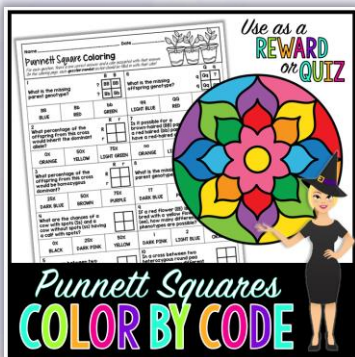
Copying **any** part of this product and placing it **on the Internet in any form (even a personal/classroom website)** is **strictly forbidden** and is a violation of the Digital Millennium Copyright Act (DMCA). These items can be picked up in a google search and then shared worldwide for free.



JOIN MY **NEWSLETTER** FOR **EXCLUSIVE FREEBIES**, NEW BLOG POSTS, GIVEAWAYS, AND SALE NOTIFICATIONS! **CLICK HERE** TO HAVE THIS AND MORE DELIVERED TO YOUR INBOX!



YOU MIGHT BE INTERESTED IN THESE ADDITIONAL RESOURCES:



CLIP ART & GRAPHICS CREDIT:



In a species of flowers, red petals (R) are dominant to orange petals (r). If two plants heterozygous for red petals are crossed, what are the possible genotypes of the offspring?

- a. Rr only
- b. RR, rr only
- c. Rr, rr only
- d. RR, Rr, and rr

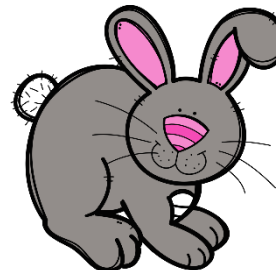


1

© 2016 Tammy Morehouse

Sam has two pet rabbits with gray fur. When her rabbits mated, one of their four offspring had white fur. The other three had gray fur. Which of the following conclusions is most likely true about the genotypes of Sam's rabbits?

- a. gg, gg
- b. GG, GG
- c. Gg, Gg
- d. GG, Gg



2

© 2016 Tammy Morehouse

In a breed of dogs, long hair (L) is dominant to short hair (l).

Based on the Punnett square, offspring with long hair is indicated in which box or boxes?



	L	l
L	1	2
l	3	4

3

© 2016 Tammy Morehouse

In corn plants, tall (T) is dominant to short (t). What are the chances of two heterozygous tall plants producing short offspring?

- a. one in four
- b. two in four
- c. three in four
- d. four in four



4

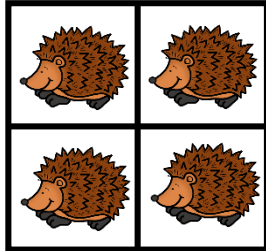
© 2016 Tammy Morehouse

B = brown
b = white

BB



bb



Explain why in this crossing all of the hedgehog offspring are brown even though they all carry the white gene.

5

© 2016 Tammy Morehouse

What are the genotypes of the parents that would result in the following Punnett Square?

	?	?
?	GG	GG
?	Gg	Gg

- a. gg, gg
- b. GG, GG
- c. Gg, Gg
- d. GG, Gg

6

© 2016 Tammy Morehouse

In sheep, the allele for white wool (W) is dominant, and the allele for black wool (w) is recessive.



If a heterozygous white sheep is crossed with a homozygous black sheep, what percent of their offspring could be black?

7

© 2016 Tammy Morehouse

These parents have two daughters and two sons. Based on the parent's genes, which children have *straight* hair?



Two dominant genes for straight hair.



Two recessive genes for curly hair.

- a. Only the sons.
- b. Only the daughters.
- c. All of the children.
- d. None of the children.

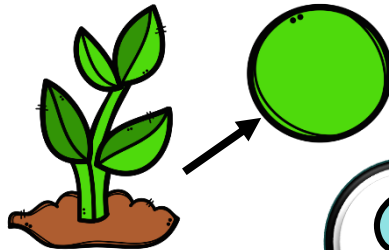
8

© 2016 Tammy Morehouse

In pea plants, the allele for round seeds (R) is dominant to the allele for oval seeds (r).

In a cross between these two plants, what percentage of the offspring will have round seeds?

	R	r
R		
r		



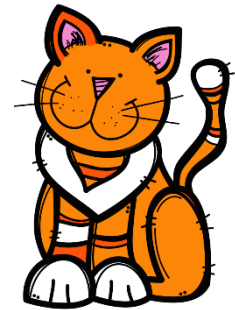
9

© 2016 Tammy Morehouse

One cat carries heterozygous, long-haired traits (Ss), and its mate carries homozygous short-haired traits (ss).

Which of the following correctly describes the possible ratios of their offspring.

- a. 0 long to 4 short
- b. 1 long to 3 short
- c. 2 long to 2 short
- d. 3 long to 1 short



10

© 2016 Tammy Morehouse

A pink tulip plant (PP) and a white tulip plant (pp) are crossed.

Which of the best describes the genotype of the offspring from this cross?

- a. Homozygous dominant
- b. Heterozygous
- c. Homozygous recessive



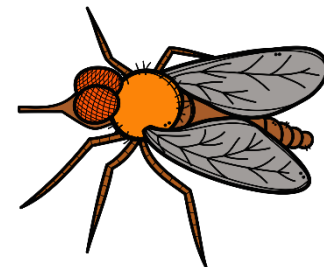
11

© 2016 Tammy Morehouse

In a breed of flies, red eyes (E) are dominant to black eyes (e).

If a homozygous red-eyed fly (EE) is cross bred with a homozygous black-eyed fly (ee), how many different phenotypes are possible?

- a. 1
- b. 2
- c. 3
- d. 4



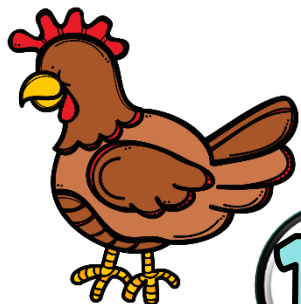
12

© 2016 Tammy Morehouse

In a breed of chicken, the allele for brown feathers (F) is dominant to the allele for white feathers (f).

In a cross between these chickens, what percentage of the offspring will have white feathers?

	F	F
F		
F		



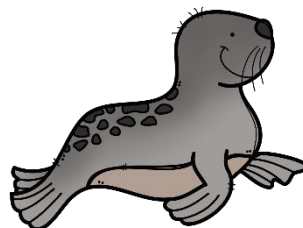
13

© 2016 Tammy Morehouse

	W	w
w	Ww	ww
w	Ww	ww

In seals, long whiskers (W) are dominant to short whiskers (w).

What are the phenotypes of these parents?



- WW, WW
- WW, ww
- both long
- 1 long, 1 short

14

© 2016 Tammy Morehouse

In dragons, blue horns (B) are dominant to yellow horns (b).

What percent of these offspring would have yellow horns?

- 0 %
- 25 %
- 50 %
- 75 %

	B	b
b	Bb	bb
b	Bb	bb

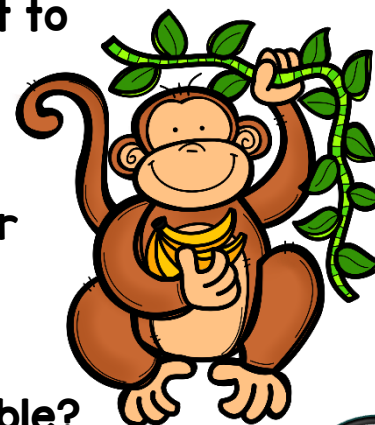


15

© 2016 Tammy Morehouse

In a type of monkey, long tails (T) are dominant to short tails (t).

If a heterozygous long tail monkey is crossed with another heterozygous long tailed monkey, how many different genotypes are possible?

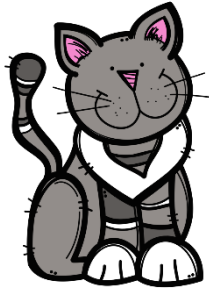


16

© 2016 Tammy Morehouse

One cat carries heterozygous, long-haired traits (Ss), and its mate carries homozygous short-haired traits (ss).

What percent of the offspring would be homozygous long hair?

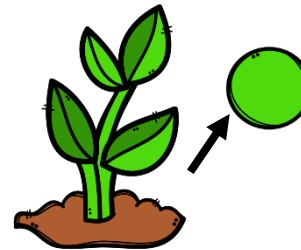


- a. 0 %
- b. 25 %
- c. 50 %
- d. 75 %

17

© 2016 Tammy Morehouse

	R	r
R	RR	Rr
r	Rr	rr



In pea plants, the allele for round seeds (R) is dominant to the allele for oval seeds (r).

In a cross between these two plants, what percentage of the offspring will be heterozygous round?

18

© 2016 Tammy Morehouse

In dragons, blue horns (B) are dominant to yellow horns (b).

What is the ratio of offspring with blue or yellow horns?

- a. 1 blue to 3 yellow
- b. 2 blue to 2 yellow
- c. 3 blue to 1 yellow
- d. 4 blue to 0 yellow



	B	b
B	BB	Bb
b	Bb	bb

19

© 2016 Tammy Morehouse

In sheep, the allele for white wool (W) is dominant, and the allele for black wool (w) is recessive.



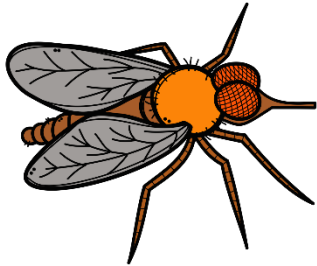
If a heterozygous white sheep is crossed with a homozygous black sheep, how many different genotypes are possible?

20

© 2016 Tammy Morehouse

In a breed of flies, red eyes (E) are dominant to black eyes (e).

If a heterozygous red-eyed fly (Ee) is cross bred with a homozygous black-eyed fly (ee), what percentage would have a homozygous genotype?



- a. 0 %
- b. 25 %
- c. 50 %
- d. 75 %

21

© 2016 Tammy Morehouse

RR	RR
Rr	Rr

Which of the following statements describes the parental genotypes that would result in this Punnett square?





- a. Both parents are heterozygous.
- b. Both parents are homozygous dominant.
- c. One parent is homozygous recessive and the other parent is heterozygous.
- d. One parent is homozygous dominant and the other parent is heterozygous.

22

© 2016 Tammy Morehouse

B = brown
b = white





Explain why this crossing could result in white hedgehogs even though brown is dominant.

23

© 2016 Tammy Morehouse

These parents have two daughters and two sons. Based on the parent's genes, which of the children have *curly* hair?



Two dominant genes for straight hair.



Two recessive genes for curly hair.

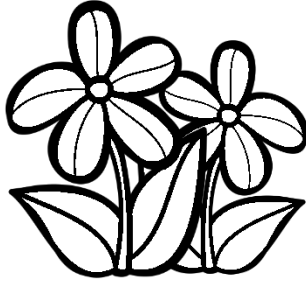
- a. Only the sons.
- b. Only the daughters.
- c. All of the children.
- d. None of the children.

24

© 2016 Tammy Morehouse

In a species of flowers, red petals (R) are dominant to orange petals (r). If two plants heterozygous for red petals are crossed, what are the possible genotypes of the offspring?

- a. Rr only
- b. RR, rr only
- c. Rr, rr only
- d. RR, Rr, and rr

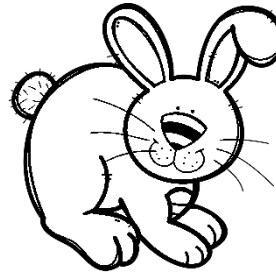


1

© 2016 Tammy Morehouse

Sam has two pet rabbits with gray fur. When her rabbits mated, one of their four offspring had white fur. The other three had gray fur. Which of the following conclusions is most likely true about the genotypes of Sam's rabbits?

- a. gg, gg
- b. GG, GG
- c. Gg, Gg
- d. GG, Gg



2

© 2016 Tammy Morehouse

In a breed of dogs, long hair (L) is dominant to short hair (l). Based on the Punnett square, offspring with long hair is indicated in which box or boxes?



	L	l
L	1	2
l	3	4

3

© 2016 Tammy Morehouse

In corn plants, tall (T) is dominant to short (t). What are the chances of two heterozygous tall plants producing short offspring?

- a. one in four
- b. two in four
- c. three in four
- d. four in four



4

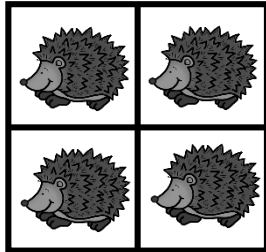
© 2016 Tammy Morehouse

B = brown
b = white

BB



bb



Explain why in this crossing all of the hedgehog offspring are brown even though they all carry the white gene.

5

© 2016 Tammy Morehouse

What are the genotypes of the parents that would result in the following Punnett Square?

	?	?
?	GG	GG
?	Gg	Gg

- a. gg, gg
- b. GG, GG
- c. Gg, Gg
- d. GG, Gg

6

© 2016 Tammy Morehouse

In sheep, the allele for white wool (W) is dominant, and the allele for black wool (w) is recessive.



If a heterozygous white sheep is crossed with a homozygous black sheep, what percent of their offspring could be black?

7

© 2016 Tammy Morehouse

These parents have two daughters and two sons. Based on the parent's genes, which children have *straight* hair?



Two dominant genes for straight hair.



Two recessive genes for curly hair.

- a. Only the sons.
- b. Only the daughters.
- c. All of the children.
- d. None of the children.

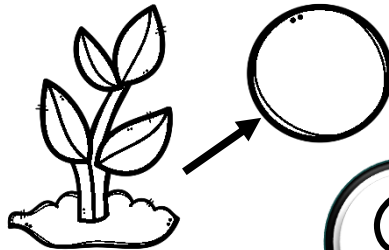
8

© 2016 Tammy Morehouse

In pea plants, the allele for round seeds (R) is dominant to the allele for oval seeds (r).

In a cross between these two plants, what percentage of the offspring will have round seeds?

	R	r
R		
r		



© 2016 Tammy Morehouse

One cat carries heterozygous, long-haired traits (Ss), and its mate carries homozygous short-haired traits (ss).

Which of the following correctly describes the possible ratios of their offspring.

- a. 0 long to 4 short
- b. 1 long to 3 short
- c. 2 long to 2 short
- d. 3 long to 1 short

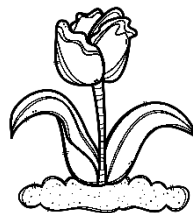


© 2016 Tammy Morehouse

A pink tulip plant (PP) and a white tulip plant (pp) are crossed.

Which of the best describes the genotype of the offspring from this cross?

- a. Homozygous dominant
- b. Heterozygous
- c. Homozygous recessive
- d. Heterozygous recessive.

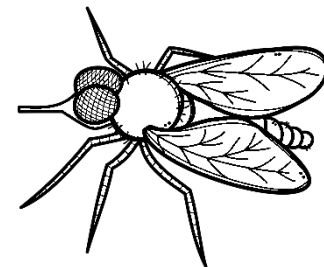


© 2016 Tammy Morehouse

In a breed of flies, red eyes (E) are dominant to black eyes (e).

If a homozygous red-eyed fly (EE) is cross bred with a homozygous black-eyed fly (ee), how many different phenotypes are possible?

- a. 1
- b. 2
- c. 3
- d. 4

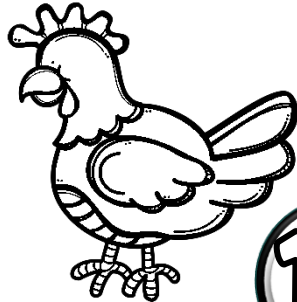


© 2016 Tammy Morehouse

In a breed of chicken, the allele for brown feathers (F) is dominant to the allele for white feathers (f).

In a cross between these chickens, what percentage of the offspring will have white feathers?

	F	F
F		
F		



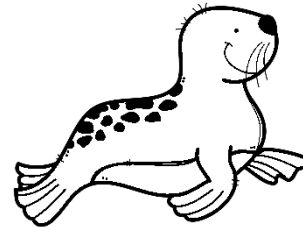
13

© 2016 Tammy Morehouse

	W	w
w	Ww	ww
w	Ww	ww

In seals, long whiskers (W) are dominant to short whiskers (w).

What are the phenotypes of these parents?



- WW, WW
- WW, ww
- both long
- 1 long, 1 short

14

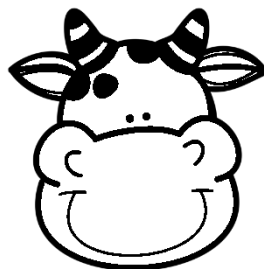
© 2016 Tammy Morehouse

In dragons, blue horns (B) are dominant to yellow horns (b).

What percent of these offspring would have yellow horns?

- 0 %
- 25 %
- 50 %
- 75 %

	B	b
b	Bb	bb
b	Bb	bb

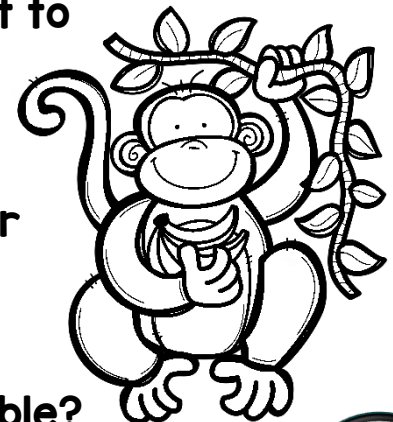


15

© 2016 Tammy Morehouse

In a type of monkey, long tails (T) are dominant to short tails (t).

If a heterozygous long tail monkey is crossed with another heterozygous long tailed monkey, how many different genotypes are possible?



16

© 2016 Tammy Morehouse

One cat carries heterozygous, long-haired traits (Ss), and its mate carries homozygous short-haired traits (ss).

What percent of the offspring would be homozygous long hair?

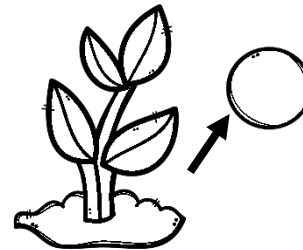


- a. 0 %
- b. 25 %
- c. 50 %
- d. 75 %

17

© 2016 Tammy Morehouse

	R	r
R	RR	Rr
r	Rr	rr



In pea plants, the allele for round seeds (R) is dominant to the allele for oval seeds (r).

In a cross between these two plants, what percentage of the offspring will be heterozygous round?

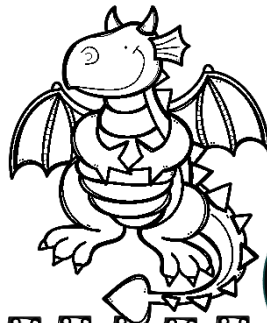
18

© 2016 Tammy Morehouse

In dragons, blue horns (B) are dominant to yellow horns (b).

What is the ratio of offspring with blue or yellow horns?

- a. 1 blue to 3 yellow
- b. 2 blue to 2 yellow
- c. 3 blue to 1 yellow
- d. 4 blue to 0 yellow



	B	b
B	BB	Bb
b	Bb	bb

19

© 2016 Tammy Morehouse

In sheep, the allele for white wool (W) is dominant, and the allele for black wool (w) is recessive.



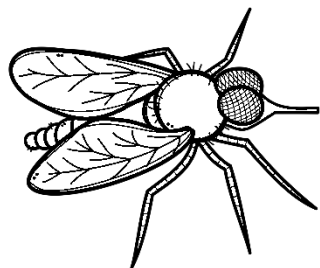
If a heterozygous white sheep is crossed with a homozygous black sheep, how many different genotypes are possible?

20

© 2016 Tammy Morehouse

In a breed of flies, red eyes (E) are dominant to black eyes (e).

If a heterozygous red-eyed fly (Ee) is cross bred with a homozygous black-eyed fly (ee), what percentage would have a homozygous genotype?



- a. 0 %
- b. 25 %
- c. 50 %
- d. 75 %

21

© 2016 Tammy Morehouse

RR	RR
Rr	Rr

Which of the following statements describes the parental genotypes that would result in this Punnett square?





- a. Both parents are heterozygous.
- b. Both parents are homozygous dominant.
- c. One parent is homozygous recessive and the other parent is heterozygous.
- d. One parent is homozygous dominant and the other parent is heterozygous.

22

© 2016 Tammy Morehouse

B = brown
b = white



Explain why this crossing could result in white hedgehogs even though brown is dominant.

23

© 2016 Tammy Morehouse

These parents have two daughters and two sons. Based on the parent's genes, which of the children have *curly* hair?



Two dominant genes for straight hair.



Two recessive genes for curly hair.

- a. Only the sons.
- b. Only the daughters.
- c. All of the children.
- d. None of the children.

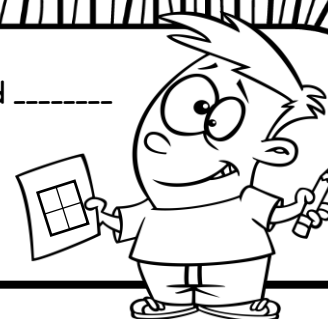
24

© 2016 Tammy Morehouse

Name _____ Date _____ Period _____

Punnett Squares *Task Cards*

Write your answers to the task cards in the spaces below.

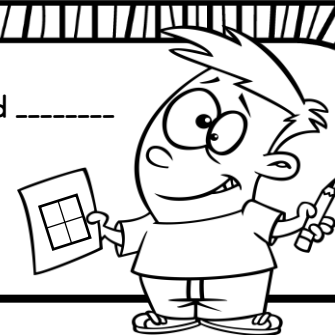


1	9	17
2	10	18
3	11	19
4	12	20
5	13	21
6	14	22
7	15	23
8	16	24

Name _____ *Key* _____ Date _____ Period _____

Punnett Squares Task Cards

Write your answers to the task cards in the spaces below.



1 D	9 75%	17 A
2 C	10 C	18 50%
3 All 4 quadrants	11 B	19 C
4 A	12 A	20 2, Ww, ww
5 Every offspring receives a dominant allele.	13 0%	21 C
6 D	14 D	22 D
7 50%	15 C	23 The brown parent is carrying a recessive gene.
8 C	16 3, TT, Tt, tt	24 D