Genetics Review Worksheet - Unit Test on Wednesday or Thursday

1. For each genotype below, indicate whether it is heterozygous (**He**) or homozygous (**Ho**)

Ee He Ho AA He ff Ho Bb Ga He He Cc DD Ho HH Ho

Ii He Jj He kk ^{Ho} LL Ho

nn Ho Pр

Mm He

2. For each of the **genotypes** below determine what **phenotypes** would be possible.

Purple flowers are dominant to white Brown eyes are dominant to blue eyes flowers. Brown

BB

Bb

bb

Purple PP Purple Pp ___ White pp __

Bobtails in cats are recessive.

Brown

wrinkled seeds. RR _ Round Rr _ Round

Wrinkled

Round seeds are dominant to

TT Long tail Tt Long tail tt Bob tail (short)

blue

3. For each **phenotype** below, list the **genotypes** (use the letter of the dominant trait or the characteristic)

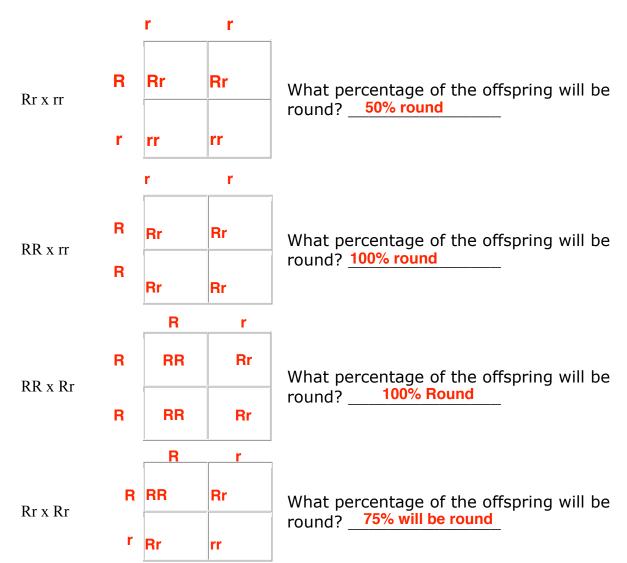
Straight hair is dominant to curly.

Pointed heads are dominant to round heads.

straight straight _ curly

pointed pointed pp round

4. Set up the Punnet squares for each of the crosses listed below. *Round* seeds are dominant to wrinkled seeds.



Practice with Crosses. Show all work!

5. A TT (tall) plant is crossed with a tt (short plant).

What percentage of the offspring will be tall? ______

6. A Tt plant is crossed with a Tt plant.

What percentage of the offspring will be short?

Name:	KEY	Period:	
	ozygous round seeded plant (Rr ed plant (RR).	r) is crossed with a	homozygous
What perce	entage of the offspring will be ho	omozygous (RR)?	50%
	zygous round seeded plant is cr eded plant.	ossed with a hom	ozygous
What are th	ne genotypes of the parents? $_$	X	rr
What perce	entage of the offspring will also	be homozygous?	0%
If two white	plants purple flowers are dominate of the second plants are cross, what wered?		
	рр х рр		
10. A white the trait.	e flowered plantis crossed with	a plant that is het	erozygous for
What perce	entage of the offspring will have	purple flowers?	50%
	рр х Рр		
are crossed What perce	entage of their offspring will hav	e purple flowers?	s flower color
What perce	entage will have white flowers?		

Name: KEY	Period:
12. In guinea pigs, the allele for sh	ort hair is dominant.
What genotype would a heterozygou	us short haired guinea pig have?
What genotype would a purebreeding	ng short haired guinea pig have?
What genotype would a long haired	guinea pig have? ff
13. Show the cross for a pure breed haired guinea pig.	ding short haired guinea pig and a long
What percentage of the offspring wi	ll have short hair? 0%
FF x ff	
14. Show the cross for two heterozy	gous guinea pigs. Ff x Ff
What percentage of the offspring wi	ll have short hair? 100%
What percentage of the offspring wi	ll have long hair? 0%
15. Two short haired guinea pigs are offspring, 25 of them have long hair the parents?	e mated several times. Out of 100 r. What are the probable genotypes of
Ff X Ff	Show the cross to prove it!