

Name _____

Date _____

Warm-UP: TEST CROSS

Show ALL work!

Problem: A chicken with single comb **SS** is crossed with a chicken with pea comb **ss**.

1. What percentage of the offspring will have single combs? _____



Single-comb

2. An **Ss** chicken is crossed with another **Ss** chicken. What percentage of the offspring will have pea combs? _____



Pea comb

3. A heterozygous yellow seeded plant (**Yy**) is crossed with a homozygous yellow seeded plant (**YY**).
What percentage of the offspring will be homozygous (**YY**)? _____
What percentage of the offspring will be heterozygous (**Yy**)? _____



4. A *homozygous* yellow seeded plant is crossed with a *homozygous* green seeded plant.

What are the **genotypes** of the parents?

_____ x _____

What percentage of the offspring will also be homozygous? _____

5. For each genotype below, indicate whether it is:

He → heterozygous, **Ho-A** → homozygous dominant, **Ho-R** → homozygous recessive

YY _____	Ff _____	CC _____	Oo _____	RR _____
Xx _____	kk _____	NN _____	ee _____	Aa _____
WW _____	Ss _____	bb _____	Hh _____	Ii _____
Uu _____	GG _____	dd _____	Qq _____	mm _____

6. For each genotype below, indicate whether it is a **Purebred** or a **Hybrid**.

YY _____	Ff _____	CC _____	Oo _____	RR _____
Xx _____	kk _____	NN _____	ee _____	Aa _____
WW _____	Ss _____	bb _____	Hh _____	Ii _____
Uu _____	GG _____	dd _____	Qq _____	mm _____

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

Red flowers are dominant to blue flowers.

RR _____
Rr _____
rr _____

Bobtail in pumas are recessive.

PP _____
Pp _____
pp _____

Gray coat is dominant to brown coat.

CC _____
Cc _____
cc _____

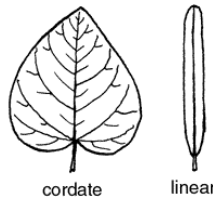
Smooth shape is dominant to pinched shape.

VV _____
Vv _____
vv _____

8. For each **phenotype** below, list the **genotypes** (remember to use the letter of the dominant trait).

Cordate leaf is dominant to linear leaf.

_____ cordate
_____ linear

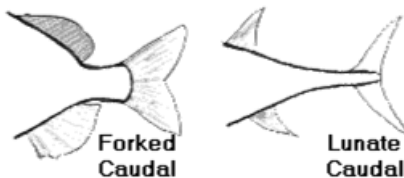


Pointed leaf tip is dominant to round leaf tip.

_____ pointed
_____ round

In fishes, a forked caudal fin is dominant to caudal fin.

_____ lunate caudal fin
_____ forked caudal fin



Blunt tail is dominant to sharp tail.

_____ sharp
_____ blunt