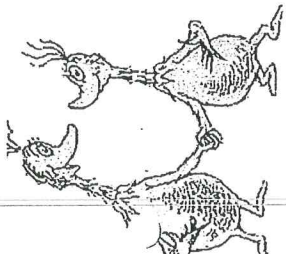


Key



Name: _____

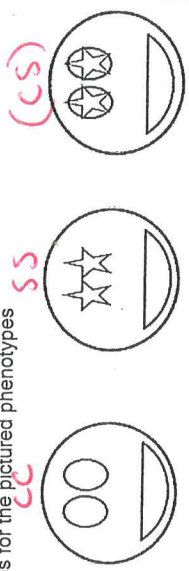
Practice: Codominance and Incomplete Dominance

- Practice setting up keys for the phenotypes listed in each set. Remember that the "medium" trait must always be heterozygous.
 - Birds can be blue, white, or white with blue-tipped feathers.
 BB ww $BBww$ (BW)
 ww (rw) RR
 - Flowers can be white, pink, or red.
 CC SS $CCSS$ (CS)
- A Hoo can have curly hair, spiked hair, or a mix of both curly and spiked.
 TT (TS) SS
- A Sneech can be tall, medium, or short.
 BB BB BB (BW) ww
- A Bleexo can be spotted, black, or white.
 BB BB BB (BW) ww

4. Now, can you figure out in the above list, which of the letters represent codominant traits and which are incomplete.

Codominant A, C, E Incompletely Dominant B, D

3. In Smiley's, eye shape can be starred, circular, or a circle with a star. Write the genotypes for the pictured phenotypes



CC	SS	CS
CS	CS	CS
CS	CS	CS

4. Show the cross between a star-eyed and a circle-eyed.
 What are the phenotypes of the offspring? 100% circle-eyed
 What are the genotypes? 100% CS

5. Show the cross between a circle-star eyed, and a circle-eyed.
 How many of the offspring are circle-eyed? 2/4 = 50%
 How many of the offspring are circle-star eyed? 2/4 = 50%

6. Show the cross between two circle-star eyed.
 How many of the offspring are circle-eyed? 1/4 = 25%
 How many of the offspring are circle-star eyed? 2/4 = 50%
 How many are star eyed? 1/4 = 25%

Incomplete and Codominance Worksheet

Answer the following questions. Provide a punnett square to support your answers where indicated. Express probabilities as percentages.

1. Explain the difference between incomplete dominance and codominance:

Inc. Dominance - 3rd phenotype that is blending of traits
Codominance - 3rd phenotype in which both traits appear.

2. In some chickens, the gene for feather color is controlled by codominance. The allele for black is B and the allele for white is W. The heterozygous phenotype is known as erminette.

- What is the genotype for black chickens? BB
- What is the genotype for white chickens? WW
- What is the genotype for erminette chickens? BW

	B	W
B	BB	BW
W	BW	WW

3. If two erminette chickens were crossed, what is the probability that:

- They would have a black chick? 25%
- They would have a white chick? 25%

Parents: BW X BW

4. A black chicken and a white chicken are crossed. What is the probability that they will have erminette chicks? 100% Parents: BB X WW

	B	W
B	BB	BW
W	BW	WW

5. In snapdragons, flower color is controlled by incomplete dominance. The two alleles are red (R) and white (W). The heterozygous genotype is expressed as pink.

- What is the phenotype of a plant with the genotype RR? Red
- What is the phenotype of a plant with the genotype WW? white
- What is the phenotype of a plant with the genotype RW? pink

6. A pink-flowered plant is crossed with a white-flowered plant. What is the probability of producing a pink-flowered plant? 50% Parents: RW X WW

	R	W
W	RW	WW
W	RW	WW

7. What cross will produce the most pink-flowered plants? Show a punnett square to support your answer. Parents: RR X WW

	R	R
W	RW	RW
W	RW	RW

= 100% RW (pink flower)