

Name _____
Projects

Date _____

Period _____



Dragon Genetics

Directions:

1. Open your EGG!



Congratulations on the birth of your new baby dragon! Now lets find out what he or she looks like!

You should have 3 chromosomes from both the mother and the father. (6 strips total)
(Mom #1, #2, #3) (Dad #1, #2, #3)

2. Record the gene information (letter and capital or not) from each chromosome onto the data table below.

	Chromosome #1	Chromosome #2	Chromosome #3
Mom	Neck Eye Color Horn	Tail Wing Color Claws	Breath Body Color Spike
Dad	Neck Eye Color Horn	Tail Wing Color Claws	Breath Body Color Spike

Key to Dragon Genes:

N-long neck	H-horn	W-red wings	F –fire breathing	S-spike at end of tail
n-short neck	h-no horn	w- yellow wings	f-does not breathe fire	s-no spike at end of tail
E-red eyes	T-long tail	C- three claws	B- green body	
e- white eyes	t- short tail	c- four claws	b- grey body	

3. Combine the genes from Mom and Dad to determine the genotype and phenotype of your Dragon using the given key.

Chromosome Pair number	Trait	Genotype	Hybrid or Pure	Phenotype
<i>Example:</i>	Neck	<i>Nn</i>	<i>Hybrid</i>	<i>Long neck</i>
1	Neck			
	Eye Color			
	Horn?			
2	Tail			
	Wing Color			
	Claws			
3	Breath			
	Body Color			
	Spike?			

4. Using the genetic traits from your selected chromosomes, construct your dragon:
 - a. Cut out and color the correct parts of the dragon and paste onto construction paper OR
 - b. Draw and color your own dragon with the correct characteristics OR
 - c. Make a model of your dragon out of clay or scrap materials

5. On the bottom of your picture or on your model you MUST put a small table listing the 3 chromosomes, genotypes and phenotypes of your dragon. Use a Ruler and Marker or the computer when creating your table.

6. Your Dragon and Table MUST be NEAT and show your best EFFORT!

This project is due on _____



Dragon Genetics -rubric

	5-Great!	3-Okay	1-Needs Improvement	Totals:
DRAGON TRAITS	Traits are correctly drawn and colored based on the genotype of your dragon	Traits are mostly correctly drawn and colored based on the genotype of your dragon Incorrect:	Traits are not correctly drawn and colored based on the genotype of your dragon Incorrect:	____ x 3= ____
QUALITY	Dragon is neat and full of color	Dragon is mostly neat and full of color	Dragon is not neat and full of color	____ x 2= ____
TABLE and CONVENTIONS	Table is neatly written or typed, a ruler or computer is used to make lines/table and spelling is correct	Table is somewhat neatly written, lines are mostly straight and neat and spelling is mostly correct	Table is not neatly written, lines are not straight and neat and spelling is mostly correct	____ x 2= ____

TOTAL= _____/35 = _____%