

Dragon Genetics



December 9th and 10th, 2019

HAVE OUT: Agenda, Folder, ISN, Pencil

Homework: STUDY! Review Guide due: Friday the 13th

Science Starter:

Write down this song lyrics and tell me what it means.

“Only exes that I care about are in my chromosomes.”

Song: Like a Girl, Artist: Lizzo

Glue in ISN pages on the board when done.

About Me Survey

- Circle the response (your phenotype)
- Follow along with me to make sure you are choosing correctly
- Write the class #'s next to each response
- Glue Survey on to ISN pg. 68

Trait	Response	
1. Can you taste PTC?	Yes	No
2. Can you roll your tongue?	Yes	No
3. Do you have any food allergies?	Yes	No
4. Do you speak more than one language?	Yes	No
5. What color is your hair?		
6. What color are your eyes?		
7. Do you play any sports?	Yes	No
8. Can you cook?	Yes	No
9. What texture is your hair? (straight, wavy, curly, etc.)		
10. Are your earlobes attached or detached?	Attached	Detached
11. Do you play any instruments?	Yes	No
12. Do you have freckles?	Yes	No
13. Do you wear glasses or contacts?	Yes	No
14. Have you ever broken a bone?	Yes	No
15. Do you have a widow's peak?	Yes	No

Dragon Genetics

Glue the Dragon Genetics
pages in your ISN:

Pg. 69 - A

Pg. 70 - B

Pg. 71 - C

Pg. 72 - D



Dragon Genetics



Dragons are mystical creatures that are very **DIVERSE**. Dragons have 110 chromosomes. How many did they get from each parent?

Genotype or Phenotype?

Fire breathing is a _____.

Ff is a _____.



Dragon Genetics

It is time to use your knowledge of genetics to create a **Dragon**.

- Pick 1 chromosome from the mom's sex chromosomes and 1 chromosome from the dad's sex chromosomes.
- Is it a girl or a boy?

girl = xx

boy = xy

Congratulations! Name your dragon 😊



Dragon Genetics

Below are two sample **chromosomes** from a dragon, one from Dad and one from Mom. There are three **traits** and the **genotypes** for the traits on the **chromosome**.

#1	Neck	Eye Color	Horn
DAD	N	e	h

#1	Neck	Eye Color	Horn
MOM	N	e	H

- What are the three traits listed on the chromosomes?
- What is the genotype for the neck?
- Will it be the dominant or recessive trait?
- What is the genotype for the horn?
- What will the dragon look like?



Dragon Genetics

- Remove the chromosomes from the Mom and Dad bags.
- Match the chromosomes according to their numbers. 1 2 3
- Start with chromosome #1 and record the 3 traits and the genotypes for each in the Dragon chart.
- Determine if you will have a dominant or recessive trait.
- Use the key below to determine the phenotype.



Key to Dragon Genes

N = long neck

n = short neck

F = fire breathing

f = does not breath fire

S = spike at end of tail

s = no spike at end of tail

E = red eyes

e = yellow eyes

B = green body

b = gray body

W = blue wings

w = purple wings

H = horn

h = no horn

T = long tail

t = short tail

C = three claws

c = four claws

Dragon Genetics

Dragon constructing tips:

1. Color before cutting
2. Keep your area clean. Don't lose a claw!
3. Glue each piece carefully.

Get to dragon building!



December 11th and 12th, 2019

HAVE OUT: Agenda, Folder, ISN, Pencil

Homework: STUDY! Review Guide due: Friday the 13th

Science Starter:

What is your favorite phenotype for your dragon?

What genotype gave them that trait?

Have any questions about your review guide?

Friendly reminder: Today is the last to ask me.

Dragon Genetics Story – ISN pages 74+

Tell the story of your dragon. What were the parents like, what is the habitat and any other detail about your dragon.

- Title – Name of the Dragon
- Detailed story in paragraph format
- 8 genetics vocabulary words
 - Underline the vocab
 - Vocab is on page 66 in your ISN



Dragon Genetics

Grade Includes:

ISN pages – A/B

ISN pages – C/D

ISN pages – Dragon Body

ISN pages – Dragon Story

Do your best work for the last assignment of the year!