







b  b

B 	 B b	 B b
B 	 B b	 B b


# LIFE 7

## GENETICS 2


SCIENCE 8 DECEMBER 2019  
MRS. PLYTER [PLYTER.COM/SCIENCE](http://PLYTER.COM/SCIENCE)

Name \_\_\_\_\_ Period \_\_\_\_\_

Thu



♀

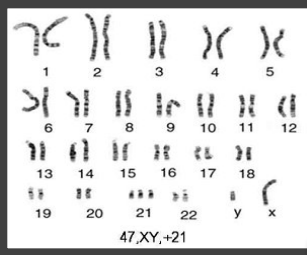


♂

### Karyotyping:

**Make a Karyotype**  
Science→Life→Genetics  
Have screen checked.

**Karyotyping Handout:**



**The Karyotype ↑↑**  
 \_\_\_\_\_ (normal /abnormal?)  
 \_\_\_\_\_ (human/other?)  
 \_\_\_\_\_ (♂ or ♀?)  
 \_\_\_\_\_ (male or female?)  
 with a diagnosis of \_\_\_\_\_  
 Doctors would write the notation as \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_


If Time:  
**Karyotyping Activity:**  
 Science→Life→Genetics  
 + handout. \_\_\_\_\_

3

**Punnett Squares:**  
**How are Traits Passed to Offspring?** Science→ McGraw Hill + Handout \_\_\_\_\_

**Genetics Problems:**  
 Science→Life→Genetics  
 Check as you go + Screen Check  
**Monohybrid Cross + Testcross**

If Time: Continue ↑ \_\_\_\_\_




**Rabbits ↑↑**  
 a) Offspring Probability:  
 \_\_\_\_\_% Round \_\_\_\_\_% Slim  
 b) Dominant:  
 Round or slim? \_\_\_\_\_

4


**Punnett Squares:**  
**Punnett Squares Handout.**  
 Science→Life→Genetics  
**Color Arrangement Test** \_\_\_\_\_  
**BOGO Sex Linked Traits.** \_\_\_\_\_

**Family Pedigree Tree Part 2:**  
**Traits + Additions**  
 1. Trait Key: 1 ea \_\_\_/5+  
 2. Traits: ¼ pt ea \_\_\_/5+  
 3. Family Trait or Disorder  
 Trait 5 ea \_\_\_/5+  
 4. New People \_\_\_/5+

Blue ♀



Red ♂



A	A
a	Aa
a	Aa
a	Aa

**Flamingos ↑↑**  
 Red = A Blue = a  
 a) Offspring Probability:  
 \_\_\_\_\_% Red  
 \_\_\_\_\_% Blue  
 b) Male Parent:  
 Red or blue? \_\_\_\_\_

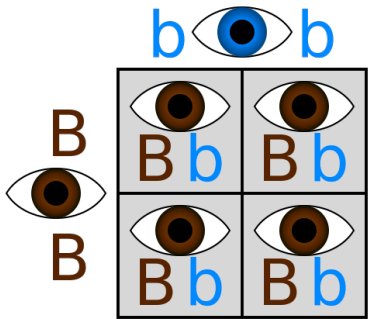
**Human Genomes:**  
**Genetic Disorders** Handout  
 Handouts + Posters +Text + Online  
 1) Down Syndrome.  
 2) Sickle Cell Disease  
 3) One from assigned chromosome.  
 4) \_\_\_\_\_ [if time: Do More]

**Central Science Page**  
[plyter.com/science](http://plyter.com/science)  
**Practice Tests→MyGradebook**  
 Plyter20 Student # \_\_\_\_\_  
**McGraw Hill Rubber Duck** Ask!  
 How are Traits Passed... + Handout.  
**Central Science → Life Science → Genetics**  
 Make a Karyotype  
 Genetics Problems (If Time..More)  
 BOGO Sex Linked Traits...Hemophilia  
 Color Vision→Color Arrangement Test

**If Time—If you haven't** Genetics→  
 Karyotype Activity + Handout \_\_\_\_\_  
 Rutgers Virtual Lab Karyotyping \_\_\_\_\_  
 Fruit Fly Interactive -Ask \_\_\_\_\_  
 Bill Nye Video Clips \_\_\_\_\_  
 What is a Chromosome? \_\_\_\_\_  
 Click and Clone \_\_\_\_\_  
 Cloning or Not? \_\_\_\_\_  
 McGraw Hill → BrainPOP Heredity \_\_\_\_\_  
 Vintage iMac: DNA Workshop Activity \_\_\_\_\_  
**Google Page→Google Classroom**  
 Class Code: yzbzxn  
 Genetics Timeline \_\_\_\_\_  
**Discovery Education** 24yearlastf -Stu # \_\_\_\_\_

Points
Objective Grade
Calendar
Karyotyping
Punnett Squares
Family Pedigree
Extra
<b>Quiz Points:</b> Write Score. Initial in Color.
Mon _____
Tue _____
Wed _____
Thu _____
<b>Total</b> _____
<b>What2Learn</b> Initial in Color
Fri _____





# OBJECTIVE:

### Your Grade for Last Week:

	Yours	Required
Objective + Grade	___	10
Calendar	___	10
Offspring	___	10
Family Pedigree Tree	___	17
Prefixes	___	10
Quiz + What2Learn	___	17
Extra	___	
<b>Total</b>	_____	<b>74</b>

Write the Objective:

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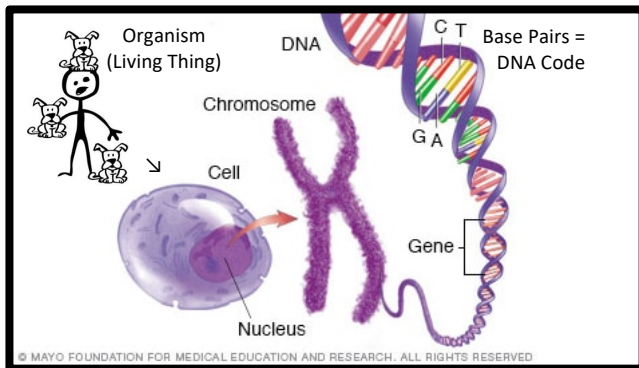
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Yours / Required X 100 = your %  
 \_\_\_ / \_\_\_ 74 X 100 = \_\_\_ %  
 Look up your % in Gradebook \_\_\_ %  
 Last week your % was \_\_\_ (↑ or ↓ ? )  
 from what you have in the gradebook?  
 By how many % points? \_\_\_\_\_

*Look for blanks & Labels on Calendar!  
 Hand in Late! Do "If Time".*



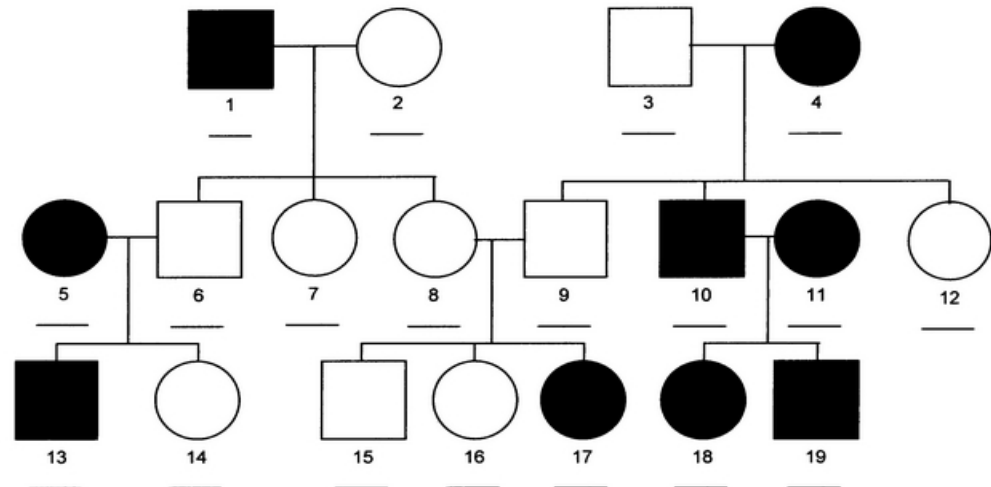
### From YOU, or any organism, TO YOUR (or their) DNA Code:

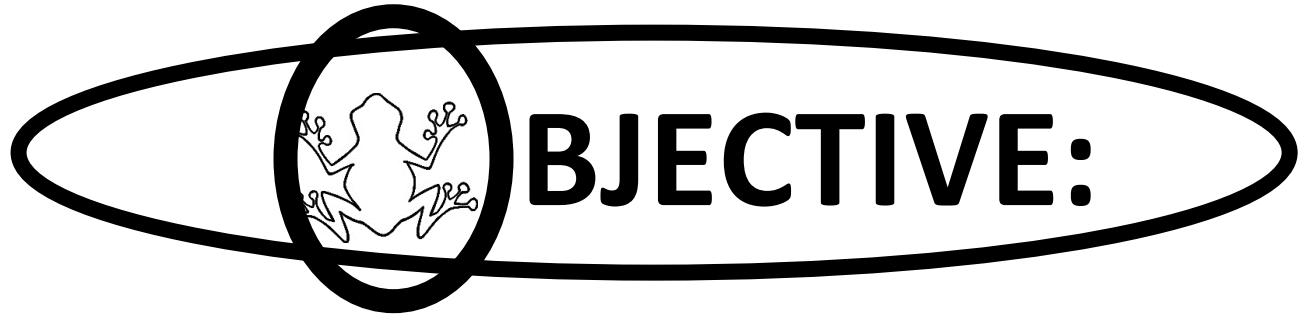
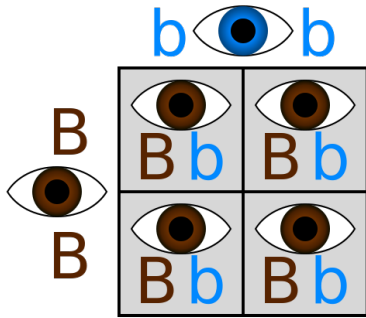
← Use the diagram at left for help. Fill in the structures, in order, from **larger to smaller**.

\_\_\_\_\_s are made up of \_\_\_\_\_s, each of which has a \_\_\_\_\_ where the \_\_\_\_\_s are found and made up of coiled \_\_\_\_\_, which has sections called \_\_\_\_\_, which can be divided into the DNA \_\_\_\_\_, made up of \_\_\_\_\_, which are abbreviated by the letters \_\_\_\_, \_\_\_\_, \_\_\_\_, and \_\_\_\_.

Label this Family Pedigree →  
 as if it were yours. →

- \_\_\_ 1) Using relationship terms.
- \_\_\_ 2) Label #8 Mom.
- \_\_\_ 3) #9 is Dad.
- \_\_\_ 4) # 15 or #16 should be you ("Me").
- \_\_\_ 5) The color means a trait. Ignore for now.





Use Punnett Squares and Karyotype models to understand that in sexual reproduction organisms have multiple pairs of chromosomes (50% from each parent) that contain the information for the type of organism and its traits (characteristics).