

Noun
the study of heredity
and the variation of inherited 
characteristics

### Heredity

Nour

the passing on of physical or mental characteristics genetically from one generation to another.



#### Inherited

**Verb** 

derive (a quality, characteristic, or predisposition) genetically from one's parents or ancestors.

#### Standard Addressed

MS-LS3-2. Develop and use a model to describe why asexual reproduction (single parent ie: cells) results in offspring with identical genetic information and sexual reproduction (two parents ie: animals) results in offspring with genetic variation.

#### **Unit Goals**

- I can identify specific genetic traits passed down from parents.
- I can tell the difference between dominant and recessive traits.
- I can develop and use a model to describe sexual reproduction results in offspring with genetic variation. (MS LS3-2)
- I can develop and use a model to describe sexual reproduction results in offspring with genetic variation. (MS LS3-2)

# With each ISN entry, add the Unit Goal or Goals that apply to that activity.

At the end of each class period, complete this short **Exit Form** 

## Discover

Watch: Introduction to Genetics
View: Spooky Split Face Portraits

**Do:** Make >3 general qualitative observations about the images on the faces in the images

on this website.

#### Learn

Watch: Ted-Ed Genetics Lesson

**Do:** Complete the Ted-Ed lesson. In your ISN, write the vocabulary. Be sure to set up the page properly and include an image to help you remember the meaning of the word.

Watch: Genes & Alleles

**Do:** Complete the guided worksheet as you watch the video. The worksheet goes right along with the video.

**Read:** Genetic Vocabulary You will get a copy of this reading for your ISN. Be sure to complete the work in your ISN so you have it for reference later on.

**Do:** Complete the questions after you read.



Find a person who is in the same place as you are and complete the Vocabulary word sort. Have Mrs. Spyrison check it before you glue it in your ISN or move on.

# **Explore**

Watch: Inherited Human Traits

**Do:** <u>Human Traits Inventory</u> After you complete the Genetic Vocabulary reading, complete

this short survey about you and your traits.

### Wonder & Wow

**Do:** Think back over all you have done in this usint so far. Complete a 3-2-1 in your ISN. Then add your question to the Wonder Wall using a notecard. Put your name and class period on the back of the card.

3 things you discovered	1. 2. 3.	
2 interesting facts or details	1. 2.	
1 thing you still wonder about	I wonder	?



Find 3 people who are in the same place as you are and practice your vocabulary by playing Genetic Spoons! Pick up a game set from the table. Be sure to treat it with respect and return everything as you found it.

# Show What You Know!

Create a symbolic image of the word that you have been assigned that is creative, colorful and shows the definition of the word. Please use a piece of white printer paper from the student center for this activity.

For example, if my word was GENE, this image shows two different ALLELES making a jean/gene. Get it?! (BTW, you can't use this for your symbolic image! Sorry Tabel 1.)

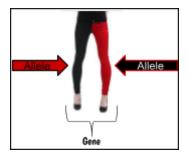


Table 1: Gene
Table 2: Allele
Table 3: Phenotype
Table 4: Genotype
Table 5: Recessive
Table 6: Dominant
Table 7: Homozygous
Table 8: Heterozygous

#### Share

Choose one (1) task on the <u>Genetics | Show What You Know</u> game board demonstrate what you have learned. Follow the direction on the attachment.