



PLTW Virtual Learning

Medical Detectives

Lesson 6

April 13, 2020



7 & 8 Grade Medical Detectives

Lesson: April 13, 2020

Objective/Learning Target:
Lesson 6, Part 1

Students will learn the difference between inherited and non-inherited traits.



Warm-Ups:

1. Get a sheet of notebook paper and write down as many things as you know about inherited traits. For example, what traits can be inherited? Who do we inherit these traits from? Time yourself for two minutes and write down as much as you can during this time. Use the [two-minute timer link](#) if needed.
2. Talk to the members in your family and find out if there are any special traits that have been passed down to them. Write these down also.

Lesson Introduction/Background Information:

Inherited vs. Non-Inherited Traits

Traits are physical characteristics that can be displayed by humans, animals and some plants. Inherited traits can be both physical and behavioral. These inherited traits are passed down genetically from one generation to the next.

Non-inherited traits are learned traits.

Practice:

Watch the following video and answer the questions below.

Inherited and Acquired Traits

1. What does an acquired (non-inherited) trait mean?
2. Can acquired traits be passed on to the next generation? Why or why not?
3. What traits, besides physical traits, can also be inherited?



Practice:

Watch the interactive video, **Learned and Inherited Behaviors**, and write down your answers as you watch the video, pausing where they ask you to pause. Your answers will be on the next slide. No looking until you have completed the video.

Learned and Inherited Behaviors

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____



Practice: Answer Key

Check your answers below for the interactive video, Learned and Inherited Behaviors.

1. Baby ducklings follow a man because he was the first thing they saw ... **imprinted learning behavior**
2. A dog rings a bell when it wants to go outside ... **conditioning learned behavior**
3. Learning how to play basketball ... **conditioning learned behavior.**
4. This dog has taken these cubs as her own ... **imprinting learned behavior.**
5. A snail digging a hole to lay eggs ... **an inherited behavior.**
6. A fiddler crab waves its claw ... **an inherited behavior.**
7. A dog fetching the paper ... **a learned behavior.**



Self Assessment:



List 3 examples of inherited traits:

1. _____
2. _____
3. _____

List 3 examples of non-inherited (acquired) traits:

1. _____
2. _____
3. _____

Answer Key:

Self Assessment Examples since students answers will vary.



Inherited Traits - Hair, eyes, skin color, Facial features, height, dimples and many m

Non-Inherited (Acquired) Traits - different mannerisms such as how you brush your teeth, table manners, greeting people, saying goodbye on phone calls, handshakes, greeting people

Extend Your Learning/Continued Practice:

Watch the video [Learned Behavior - Ecology and Environment](#) for more information.