

Name:

Points: /40

Directions: Read the following information and answer the questions.

HEY! Where did you get that from?

Just imagine you have received a call from a lawyer. He calls you into his office and you find out that a long lost and very wealthy great great uncle has suddenly passed away. He had worked hard all his life and had invested his money wisely. He had also invented several very small but extremely important computer parts which he had patents on. He has left you all his money and the rights to his patents. Sounds great right.

The above story illustrates two ideas in life. Your uncle worked hard and by his industry had **acquired** his wealth. You on the other hand have **inherited** your wealth. People have traits that they either inherit or acquire.

Traits

Traits are qualities, features or other things that distinguish people. Traits can include things like hair color, tooth shape, beak shape, bone size, or muscle structure. Traits come in two varieties: acquired and inherited.

Acquired Traits

Just like your uncle, people can acquire useful abilities. These acquired traits cannot be passed on genetically. You can't inherit your uncle's knowledge, skills, ideas or memories. Acquired traits include things such as calluses on fingers, larger muscle size from exercise or from avoiding predators. Behaviors that help people survive would also be considered acquired characteristics most of the time.

Inherited Traits

Like our story some things can be inherited. With people, inherited traits must come from a parent or other ancestor. A trait may seem to skip a generation or even two or three, but if a trait shows up it must have been present in an ancestor. Mutations are the exception to this rule. Inherited traits include things such as hair color, eye color, muscle structure, bone structure, and even features like the shape of a nose. Inheritable traits are traits that get passed down from generation to the next generation. This might include things like passing red hair down in a family

.

Answer the following questions and compare them with a peer!

What traits have you inherited?

What traits have you acquired?

List five traits which are inherited in people?

List at least five traits that are acquired in people?

<http://utahscience.oremjr.alpine.k12.ut.us/Sciber01/7th/cells/html/inhvsacq.htm>

Complete the following genogram activity:

-Draw a genogram diagram, using squares for males and circles for females, and include your parents and both sets of grandparents. Put a triangle at the top to indicate you.

Example:

-Make a key to identify your inherited and acquired traits. Give each trait a symbol.

Example:

-Fill in the genogram with the symbols.

Example: