**Notes: Traits**  **Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Notebook p**. \_\_\_\_

**Objective**: *Distinguish between acquired and inherited traits.*

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|  | Have you ever heard the expression. “you have your mother’s eyes”? Or “you have your father’s walk”? This phenomenon is not only true with people...but with animals and plants as well.    Things like skin color, fur color, and the shape of a leaf are all characteristics or traits.  A **trait** is a characteristic of a living thing. Traits can be:   * **inherited traits** - characteristics one is born with. They are passed on genetically from parents to offspring.   examples: height, natural hair color, bone structure, etc.   * **acquired traits** - obtained during the course of a person’s lifetime, including learned behaviors and contagious diseases   examples: the ability to play piano, getting chicken pox, dying your hair lime green, etc. |

*Decide whether the traits below are inherited or acquired.*

1. The shape of your nose inherited
2. The length of your toes inherited
3. Ability to hit a baseball acquired
4. The extent of your vocabulary acquired
5. Your shoe size inherited
6. Eye color inherited

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|  | These mice are siblings. Why do you think that they are different colors?  Simple traits have two alleles (or versions).  Dominant allele  Recessive allele  **Dominant traits** usually show up more frequently during genetics experiments. What color do you think is dominant in the mice? Darker fur  Other examples of dominant traits:  Brown hair, brown eyes, having a widow’s peak, having earlobes that are unattached and “dangly”, dimples  **Recessive traits** usually show up less frequently during genetics experiments. What color do you think is recessive in the mice? White fur  Other examples of recessive traits:  Red hair, blue eyes, having no widow’s peak, having earlobes that are attached, no dimples  [http://ts2.mm.bing.net/th?id=HN.608019725420004916&w=160&h=109&c=7&rs=1&url=http%3a%2f%2fwww.mahjoob.com%2fen%2fforums%2fshowthread.php%3ft%3d278849&pid=1.7](http://www.bing.com/images/search?q=dimples+cartoon&qs=n&form=QBIR&pq=dimples+cartoon&sc=5-11&sp=-1&sk=&adlt=strict#view=detail&id=442E6BB75A8EBA00CDA40F0694B4095C01424CDF&selectedIndex=33)http://www.sciencebuddies.org/Files/3190/10/Genom_img046.gif [http://ts2.mm.bing.net/th?id=HN.608017371785070936&w=257&h=84&c=7&rs=1&url=http%3a%2f%2fwww.biologycorner.com%2fAPbiology%2finheritance%2fmader_ch11_guide.html&pid=1.7](http://www.bing.com/images/search?q=widow's+peak&FORM=HDRSC2&adlt=strict#view=detail&id=17AABAB0851BED9F70B191D692562A83B3835ADD&selectedIndex=101) |

**Summary:** *Using complete sentences, describe three inherited and three acquired traits as they appear throughout your family or a family of someone you know.*

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| Inherited Traits | Acquired Traits |
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**Notes: Traits**  **Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Notebook p**. \_\_\_\_

**Objective**: *Distinguish between acquired and inherited traits.*

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|  | Have you ever heard the expression. “you have your mother’s eyes”? Or “you have your father’s walk”? This phenomenon is not only true with people...but with animals and plants as well.    Things like skin color, fur color, and the shape of a leaf are all \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_or \_\_\_\_\_\_\_\_\_\_\_\_.  A \_\_\_\_\_\_\_\_\_\_\_\_is a characteristic of a living thing. Traits can be:   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**traits** - characteristics one is \_\_\_\_\_\_with. They are passed on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_from \_\_\_\_\_\_\_\_\_\_\_\_to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   examples: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **traits** - \_\_\_\_\_\_\_\_\_\_\_\_\_during the course of a person’s \_\_\_\_\_\_\_\_\_\_\_\_, including \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and contagious \_\_\_\_\_\_\_\_\_\_\_\_   examples: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

*Decide whether the traits below are inherited or acquired.*

1. The shape of your nose \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The length of your toes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Ability to hit a baseball \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. The extent of your vocabulary \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Your shoe size \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Eye color \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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|  | These mice are siblings. Why do you think that they are different colors?  Simple traits have two \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_).  Dominant allele  Recessive allele  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**traits** \_\_\_\_\_\_\_\_\_\_\_show up more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_during genetics experiments. What color do you think is dominant in the mice? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Other examples of dominant traits:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**traits** usually show up \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ during genetics experiments. What color do you think is recessive in the mice? \_\_\_\_\_\_\_\_\_\_\_\_\_  Other examples of recessive traits:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  [http://ts2.mm.bing.net/th?id=HN.608019725420004916&w=160&h=109&c=7&rs=1&url=http%3a%2f%2fwww.mahjoob.com%2fen%2fforums%2fshowthread.php%3ft%3d278849&pid=1.7](http://www.bing.com/images/search?q=dimples+cartoon&qs=n&form=QBIR&pq=dimples+cartoon&sc=5-11&sp=-1&sk=&adlt=strict#view=detail&id=442E6BB75A8EBA00CDA40F0694B4095C01424CDF&selectedIndex=33)http://www.sciencebuddies.org/Files/3190/10/Genom_img046.gif [http://ts2.mm.bing.net/th?id=HN.608017371785070936&w=257&h=84&c=7&rs=1&url=http%3a%2f%2fwww.biologycorner.com%2fAPbiology%2finheritance%2fmader_ch11_guide.html&pid=1.7](http://www.bing.com/images/search?q=widow's+peak&FORM=HDRSC2&adlt=strict#view=detail&id=17AABAB0851BED9F70B191D692562A83B3835ADD&selectedIndex=101) |

**Summary:** *Using complete sentences, describe three inherited and three acquired traits as they appear throughout your family or a family of someone you know.*

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| Inherited Traits | Acquired Traits |
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