

**Topic 4 - Wearing Your Genes**

1. The branch of science that deals with the study of heredity is called ...
  - A. Biodiversity
  - B. Genetics
  - C. Variation
  - D. Speciation
  
2. Inherited (heritable) characteristics are those traits that are passed on to offspring directly from their parents. Heritable traits include, structural and distinguishing characteristics. All of the following are heritable traits, except ...
  - A. earlobes
  - B. skin color
  - C. eye color
  - D. artistic ability
  
3. Continuous variations are differences in characteristics that have a range of possible variations. Discrete variations are differences in characteristics that have a definite form, with a limited number of possibilities. The only discrete variation included here is ...
  - A. hair color
  - B. blood groups
  - C. earlobe attachment
  - D. tongue rolling ability
  
4. Two different types of traits are passed on from parents to offspring during sexual reproduction. When these trait types are mixed, the one that will show up in the offspring is the ...
  - A. continuous trait
  - B. recessive trait
  - C. dominant trait
  - D. discrete trait
  
5. Having six fingers on one hand is relatively rare in the general population. The following is the only true statement about this unique trait, "It is an inherited trait that is ..."
  - A. recessive with a low frequency
  - B. recessive with a high frequency
  - C. dominant with a low frequency
  - D. dominant with a high frequency
  
6. Non-inherited characteristics are acquired and not necessarily passed on from generation to generation. Some variations may be influenced by interactions with the...
  - A. parents
  - B. scientists
  - C. engineers
  - D. environment
  
7. Mutations can cause changes in the structure of organisms, including people. Mutagens, cause mutations to occur – some that have little visible effects and some that have dramatic effects. The mutagen that would have the most dramatic effect in a person would likely be ...
  - A. x-rays
  - B. gamma rays
  - C. microwaves
  - D. ultraviolet rays