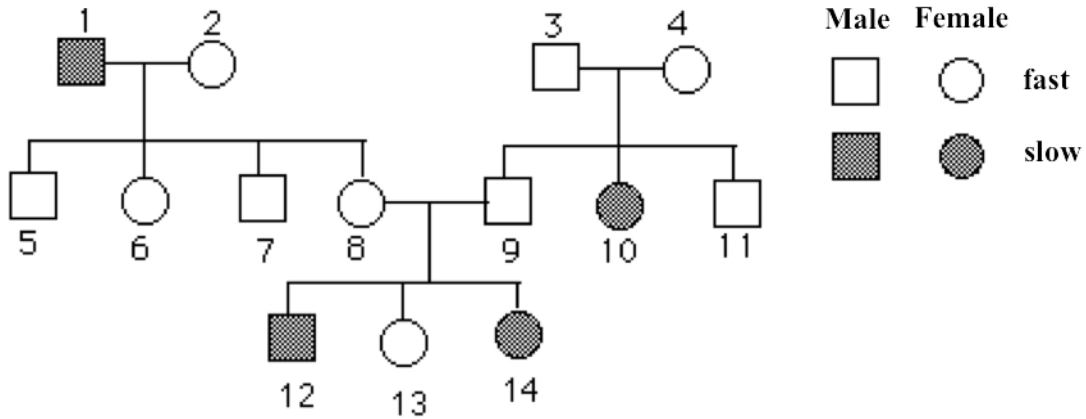


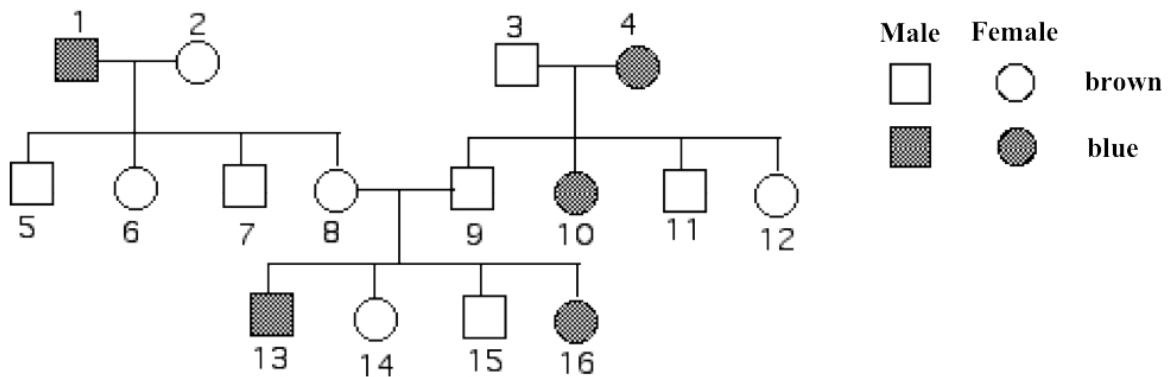
Pedigree Worksheet

1. In humans, fast-twitch muscles are dominant over slow twitch muscles. Muscle type is not a sex-linked trait. Use the pedigree chart below to answer the four questions that follow it.

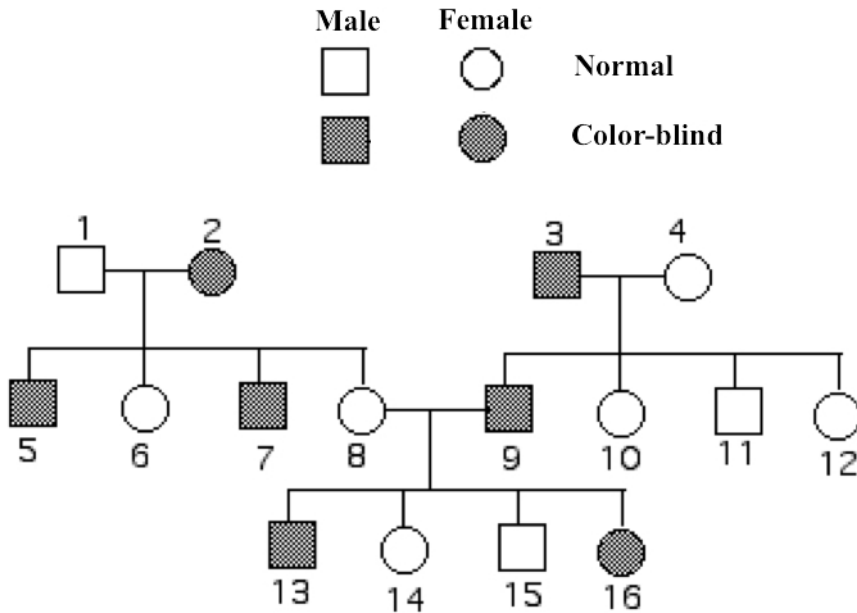


- a) Label the genotype of each individual on the pedigree chart.
- b) Can either individual #8 or #9 be homozygous? Explain.
- c) Explain the family relationship between individual #2 and individual #12.

2. In humans, brown eyes are dominant over blue eyes. Eye color is not a sex-linked trait. On the pedigree below, label the genotype of each individual.



3. Color blindness is a sex-linked trait that is caused by a recessive gene. On the pedigree below, label the genotype of each individual. Remember that, for sex-linked traits, you must indicate both the individual's sex chromosomes as well as the color blindness gene (e.g. $X^C X^c$ or Cc , $X^c Y$ or CY).



4. A blue-eyed man (#1), whose parents were brown eyed (#2 and #3), marries a brown eyed woman (#4), whose father was brown eyed (#5) and whose mother was blue eyed (#6). They have one female child who is blue eyed (#7). Blue eyes are a recessive trait that is not sex-linked.
- Draw a pedigree chart based on the information above.
 - Label the genotypes of all individuals in the chart.