

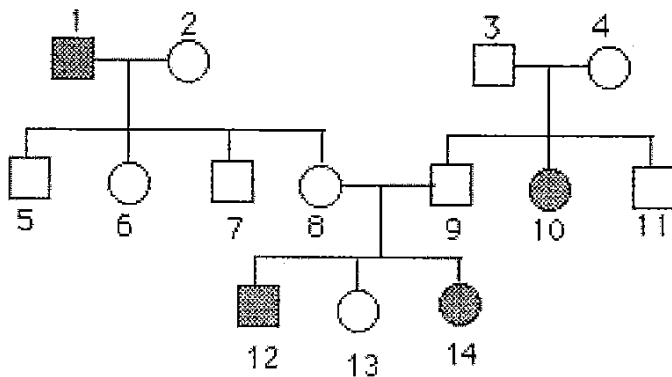
1. Draw a pedigree that represents Mary married to Greg, with 2 sons (Scott and Tyler) and 1 daughter (Karen). Please label the pedigree with the names of the people.

2. Now make a pedigree chart from the descriptions given. Label the pedigree with the names of the individuals.

a. Chad and Veronica got married and had Brittany, Kristin, and Harry. It was discovered that Harry had albinism. Brittany married Larry and had Stephan and Stephanie. Stephan also had albinism. Larry's brother Barry also had albinism, but neither of their parents had the disorder.

Draw a pedigree:

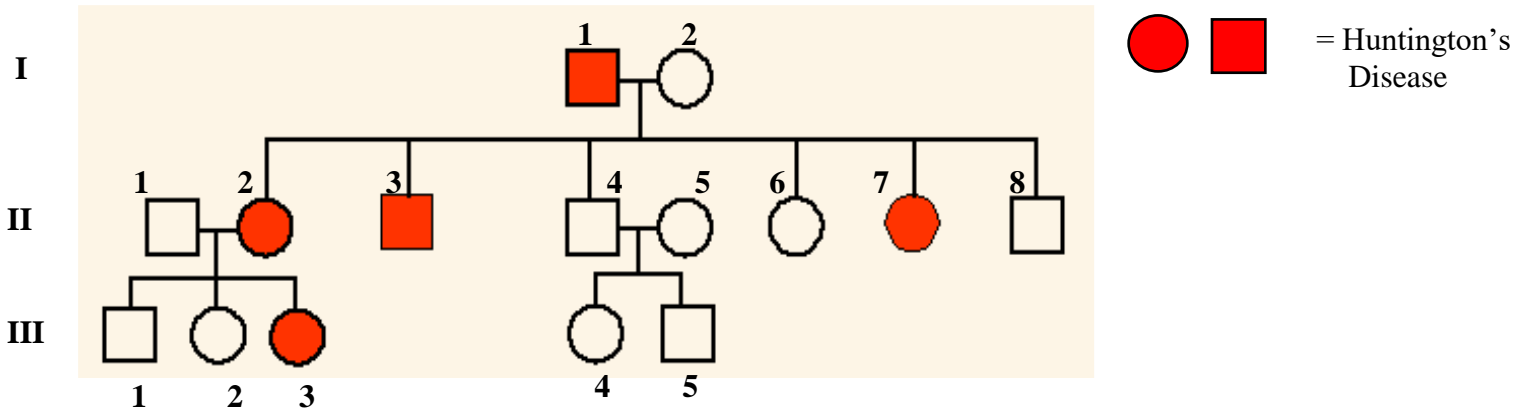
Use the pedigree below to answer the following questions about dimples. The dimple gene controls whether a person has dimples or doesn't have dimples. No dimples is dominant to dimples.



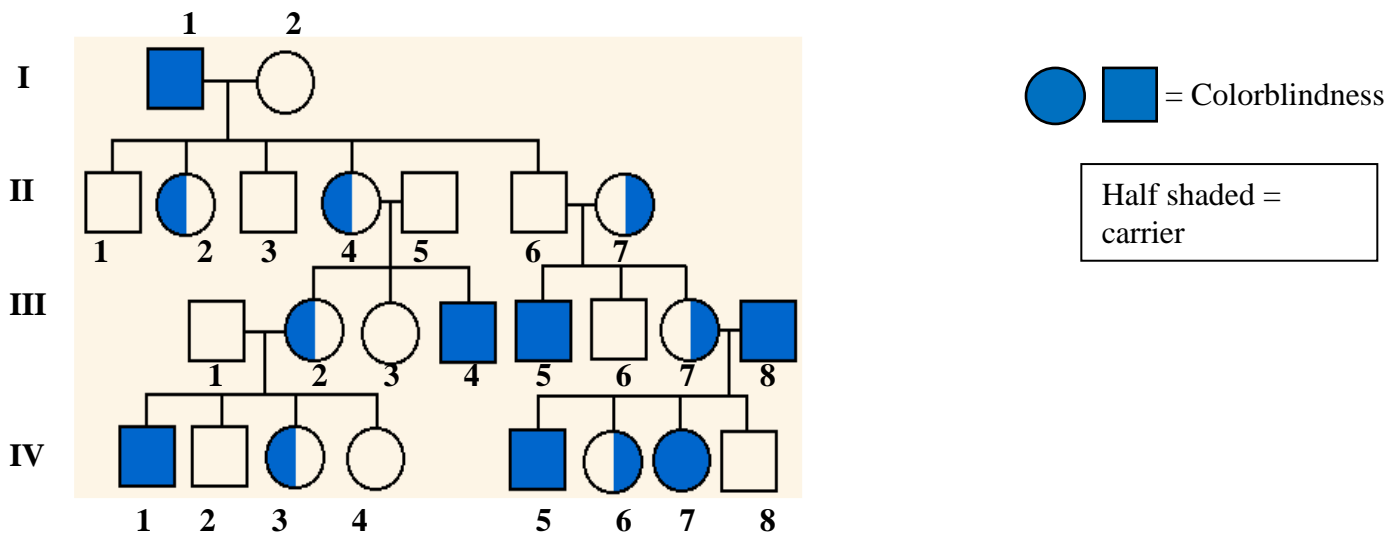
Dimples gene (D)
 No dimples is dominant to dimples

1. How many family members have dimples? _____
2. What is the genotype of individuals I-3 and I-4? (3) _____, (4) _____
3. Can either individual II-8 or II-9 be homozygous? (8) _____, (9) _____
4. Explain the family relationship between III-12 and I-2. _____

Answer the following questions using the pedigree charts. When naming individuals, put their generation first and then their number: Ex. IV-3



1. Which members of the family above are afflicted with Huntington's Disease?
2. There are no carriers for Huntington's Disease - you either have it or you don't. With this in mind, is Huntington's disease caused by a dominant or recessive trait?
3. How many children did individuals I-1 and I-2 have? _____
4. How many girls did II-1 and II-2 have? _____
How many have Huntington's Disease? _____
5. How are individual III-2 and II-4 related? _____



6. The pedigree above shows the passing on of colorblindness. What sex can ONLY be carriers of colorblindness? _____
7. Is it possible for individual IV-2 to be a carrier? _____ Why? _____
8. With this in mind, what kind of non-mendelian trait is colorblindness? _____
9. Why does individual IV-7 have colorblindness? _____
10. Why do all the daughters in generation II carry the colorblind gene? _____
11. Name 2 IV generation colorblind males. _____