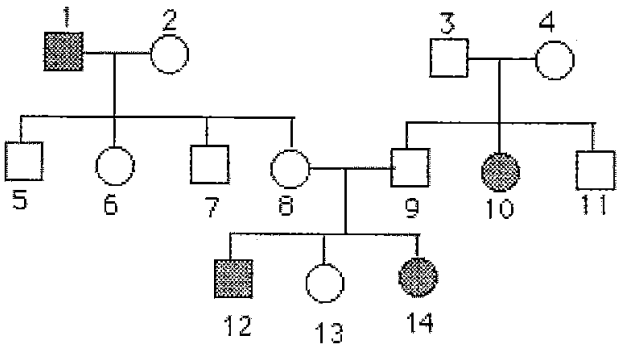
**Pedigree Practice**

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.

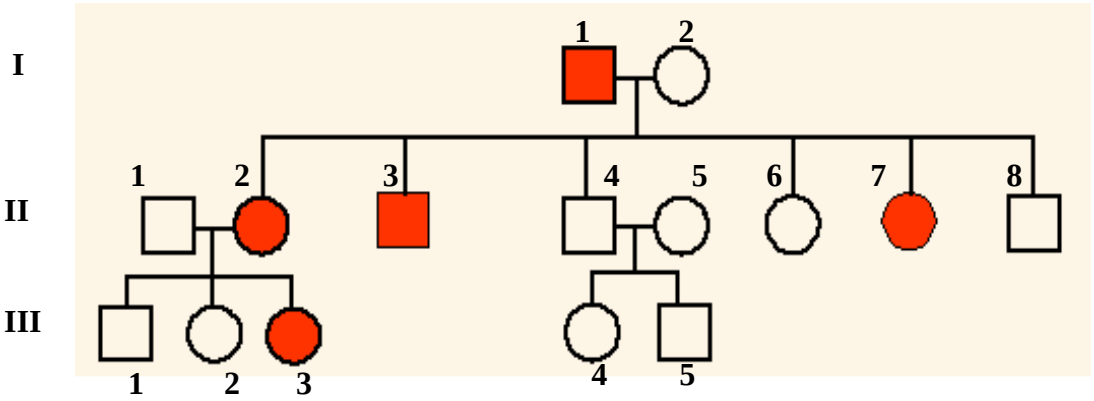



Dimples gene (D)

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 orII-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**




= Huntington's Disease

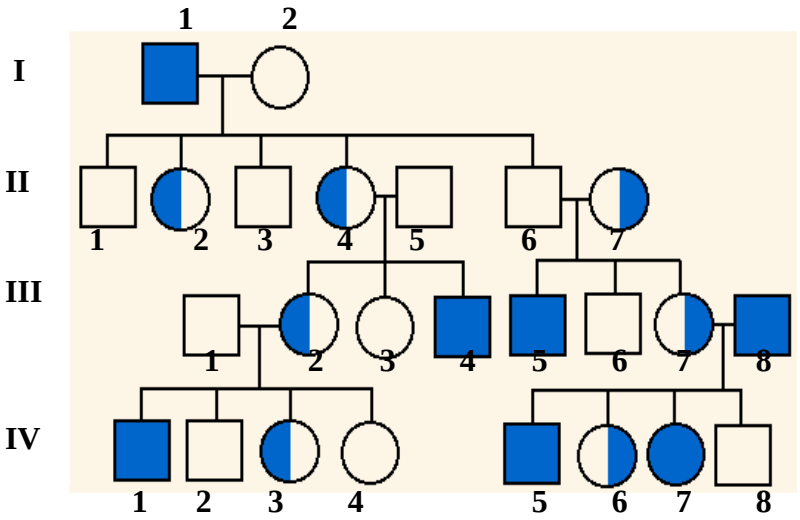
1. Which members of the family above are afflicted with Huntington's Disease?
   _____

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? _____




= Colorblindness

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 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. _____