Pedigree Worksheet

A family tree of sorts is called a **pedigree**. The symbols used for a pedigree are:

- ○ female, unaffected
- ● female, affected
- □ male, unaffected
- ■ male, affected

1. Which members of the family above are affected by 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?

5. How are individuals III-2 and II-4 related?
12. The pedigree above shows the passing on of colorblindness. What sex is MOST likely to be carriers of colorblindness?

13. Why does individual IV-7 (a female) have colorblindness?

14. Why do all the daughters in generation II carry the colorblind gene?

15. List 2 IV generation colorblind males.
16. Is this trait dominant or recessive? Explain your answer.

17. What gave you the essential information to decide that II-3 and II-4 were heterozygous?

18. Brown eyes are a dominant eye-color allele and blue eyes are recessive. A brown-eyed woman whose father had blue eyes and whose mother had brown eyes marries a brown-eyed man whose parents are also brown-eyed. They have a son who is blue-eyed.

Draw a pedigree (info above) showing all four grandparents, the two parents, and the son. Indicate each individual's possible genotypes.