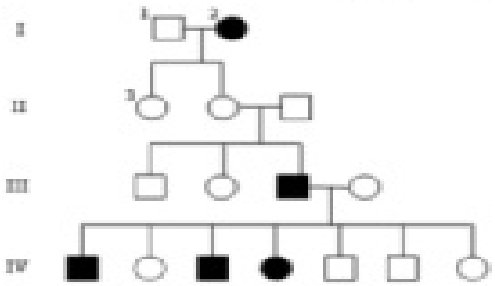
Pedigree Worksheet

Name _____
Period _____ **Date** _____

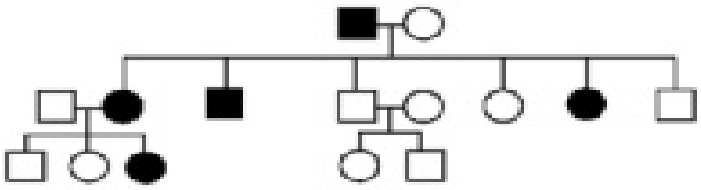
Interpreting a Human Pedigree
Use the pedigree below to answer 1-5



1. In a pedigree, a square represents a male. If it is *darkened* he has *hemophilia*; if clear, he had normal blood clotting.
   a. How many males are there? _____
   b. How many males have hemophilia? _____
2. A circle represents a female. If it is *darkened* she has *hemophilia*; if open she is normal.
   a. How many female are there? _____
   b. How many females have hemophilia? _____
3. A marriage is indicated by a horizontal line connecting a circle to a square.
   a. How many marriages are there? _____
4. A line perpendicular to a marriage line indicates the offspring. If the line ends with either a circle or a square, the couple had only one child. However, if the line is connected to another horizontal line, then several children were produced, each indicated by a short vertical line connected to the horizontal line. The first child born appears to the left and the last born to the right.
   a. How many children did the first couple (couple in row I) have? _____
   b. How many children did the third couple (couple in row II) have? _____
5. Level I represent the first generation, level II represents the second generation.
   a. How many generations are there? _____
   b. How many members are there in the fourth generation? _____

Use the pedigree below to answer 6- 12

Shaded individuals have Huntington's Disease



6. Write the generation on the pedigree numbers (roman numerals).
7. Which members of the family above are afflicted with Huntington's Disease? _____
8. 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? _____
9. How many children did individuals I-1 and I-2 have? _____
10. How many girls did II-1 and II-2 have? _____ How many have Huntington's Disease? _____
11. How is individual II-2 and II-4 related? _____ I-2 and II-5? _____
12. Write the genotypes of each individual on the pedigree.