

CREATING YOUR PERSONAL PEDIGREE

You will be using the information you collected from your family members to trace ONE trait through THREE generations of your family. You will be using the worksheet provided to set up your pedigree, which you will then use to create a colorful personal pedigree poster.

Instructions for the worksheet (on the back)...

1. Label your generations on the left-hand side with the roman numerals I, II and III.
2. Label each individual in each generation with a number (1, 2, 3...) going from left to right across each row. Begin each new generation with the number 1.
3. Out of the 3 traits you surveyed in your family, decide which one you have the most information for to use in your pedigree. Decide which form of the trait you will mark as 'affected' on your pedigree. For example, if you are choosing eye color as your trait, you may choose to indicate the individuals with brown eyes or you may choose to indicate the individuals with blue eyes. At the bottom left of your page, write the name of the trait and which form will be shown on the pedigree.
4. Now add the symbols for you and any of your siblings in the III generation. Remember to use the appropriate symbols for males and females.
5. Go through your pedigree and mark which individuals are 'affected' with the form of the trait you are tracing on your pedigree. You will do this by shading in the box or circle for that individual.
6. This step may be a bit tough... go through your pedigree and try to determine the genotype for as many individuals as possible in your pedigree. Pick a letter to use that makes it easy to distinguish between the capital and lower-case forms. Write the genotype (or partial genotype... B_...) next to each individual's symbol. If you cannot determine anything about an individual's genotype, place a '?' next to their symbol.
7. You're almost done... For any individuals who are carriers (... not affected but are heterozygous and may pass it on to any offspring...), shade in half of their symbol to show they are a carrier.
8. Write a title at the top... "Pedigree for the _____ family for the _____ trait".

Poster Instructions...

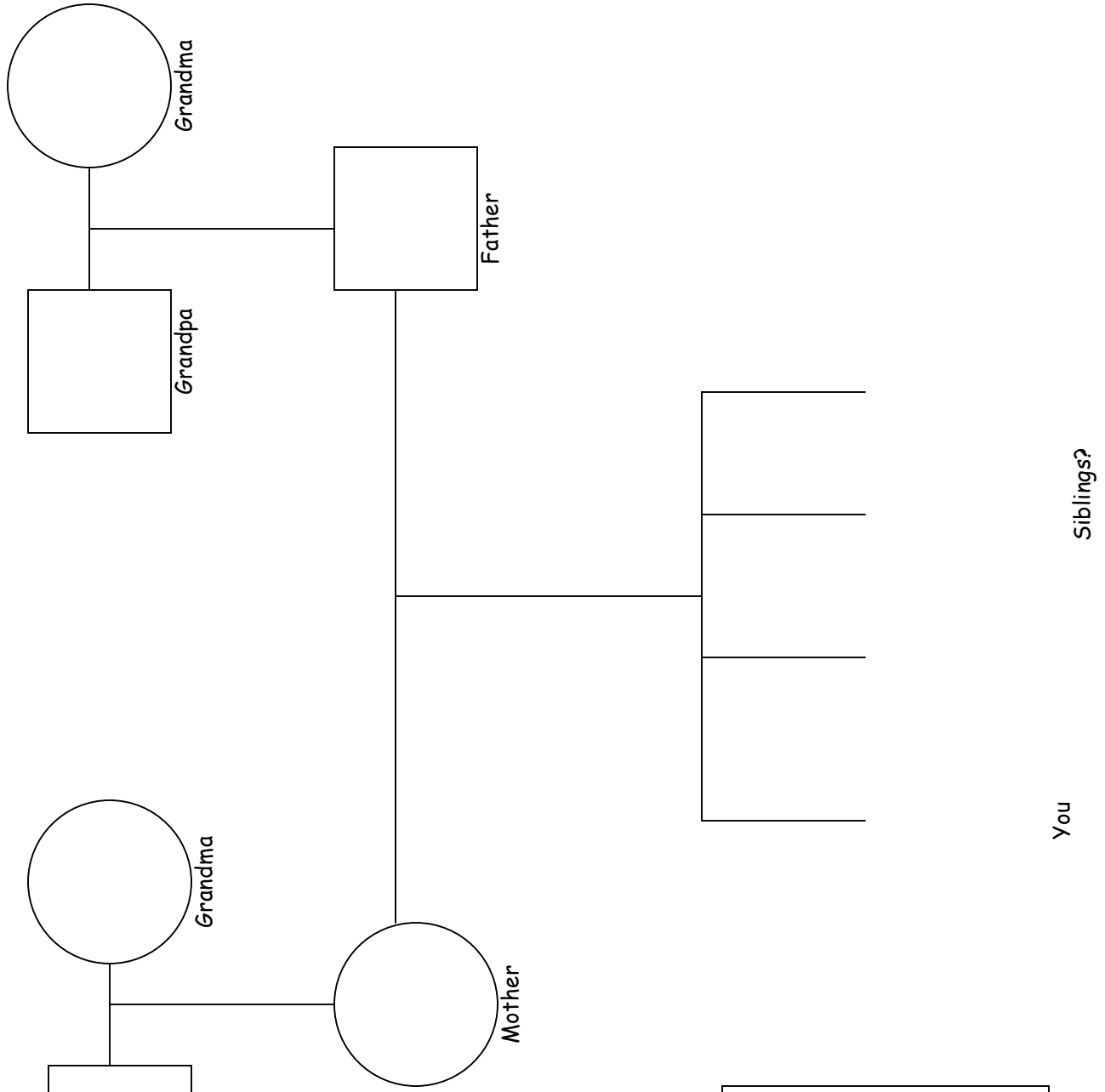
Now that you have set up your personal pedigree, take a piece of poster paper from the front and recreate your personal pedigree. Take the time to do this well... Your poster should...

- Be neat and colorful
- Fill the entire poster paper
- Include a title that indicates the trait you used and a key to all symbols
- Include your name, date and period

You will be graded on the design of your pedigree (appropriate use of symbols), neatness and use of color, and the accuracy of the genotypes. Your worksheet will count as an assignment from class, but your poster will count as a project grade.

Personal Pedigree - WORKSHEET

TITLE:



PEDIGREE KEY ...

Trait _____

□ = Male

○ = Female

● = _____ (affected)