

Building a Family Pedigree

Name: _____ **Date:** _____

LEARNING OBJECTIVE

Student will be able to construct a pedigree chart tracing a trait across at least 3 generations of a real or fictional family.

MATERIALS NEEDED

- Paper
- ruler
- pencil
- circle and square templates (or trace a cup/coin) to draw symbols

HANDS-ON ACTIVITY

1. Interview family members (or invent a fictional family) to gather information about a visible trait across 3 generations, such as attached earlobes, hair color, or ability to roll your tongue.
2. Using standard pedigree symbols (squares = male, circles = female, shaded = has the trait, unshaded = does not), draw the top generation (grandparents) first.
3. Draw connecting lines down to the next generation (parents/aunts/uncles), then to your generation (you and siblings/cousins), keeping the family tree structure organized with your ruler.
4. Shade in the symbols of every family member who shows the trait you're tracking.
5. Write a key at the bottom of your pedigree explaining what shaded vs. unshaded symbols mean and which trait you tracked.

QUESTIONS

1. What trait did you track, and how many people in your pedigree showed it?
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2. Does the trait appear to skip a generation anywhere in your pedigree? What might that suggest?
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3. Based on the pattern in your pedigree, do you think this trait is more likely dominant or recessive? Explain your reasoning.

4. Why are pedigree charts useful tools for genetic counselors studying human families?
