

Thought Lab 18.5: Reading a DNA Fingerprint

Purpose: Analyzing DNA fingerprints.

The following diagram shows the results of a gel electrophoresis analysis of one child and four different sets of parents. Use these DNA fingerprints to answer the Analysis questions and identify the child's biological parents.

	Parents A		Parents B		Parents C		Parents D	
Child	♀	♂	♀	♂	♀	♂	♀	♂

Analysis

1. Which parental DNA matches the child's DNA? How do you know?
2. Try to determine the percentage of the father's DNA that matches the child's DNA. Can you do the same for the mother's DNA? Explain why or why not.
3. Describe other situations in which DNA fingerprinting might be useful.