



Curriculum Units by Fellows of the National Initiative
2026 Volume VI: Asking Questions in Biology

Dermatoglyphics (Fingerprints), the Data Cycle, and Asking Questions

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This unit is designed to teach students to think like scientists. The students will explore skin, the largest organ in the human body, while learning about fingerprints. The unit will explore why humans, primates, and koalas have fingerprints and attempt to explain the reason for the evolutionary adaptation. They will formulate their own questions and use the data cycle. Students will explore bar graphs and line graphs as they learn how to classify fingerprints into the three main categories: arches, loops, and whorls. The students will learn the Question Formulation Technique (QFT) as described by The Right Question Institute. This unit is designed for grade 4 math and science courses. It could be adapted for use in grades 4-7 science courses. The questioning strategy (QFT) could be used in any course or content area.

(Developed for Science and Math, grade 4; recommended for Science, grades 4-7; and Math, grade 4)

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