

Activity 1

On your own, write a paragraph that answers the following questions: 1) What is the scientific method as you understand it? 2) Is your description of the scientific method a valid description of the way that all science is conducted? Why or why not?

In table groups of three to six students, discuss your initial ideas about the generalizability of scientific methods with your peers, followed by a discussion as a whole class. Your instructor might use a visual prompt such as displaying the results of a web search for "images scientific method," which will show the most common schema for generalization of a scientific method.

On your own, read the following article about the methods of geoscience:

- [Multiple Modes of Inquiry in Earth Science: Helping students understand the scientific process beyond laboratory experimentation](#), *The Science Teacher*, January 2008, 26-31. *Note: This article is available for free to all, but you may need to register for the website or log in to your NSTA account in order to access it. The registration is a free process; reduced cost membership is available for students.*

Critical reading, note-taking and question writing will require ~1–2 hours. Your instructor will introduce the [Questions-Reaction-Summary \(QRS\) method](#) for guided reading of primary literature articles.

On your own, write a brief (< 200 word) summary and 3–5 questions about your article for discussion with your peers. [Unit 1 QRS organizer](#) (Microsoft Word 2007 (.docx) 25kB Aug27 14) can be used to help you organize their response to the reading. The [QRS Assignment and Rubric](#) (Acrobat (PDF) 98kB Feb21 13) will be used to evaluate your summary and questions.