



Lesson Plan



Note: This lesson plan can be used with any *Natural Inquirer* or *Investi-gator* article.

Time Needed:

One class period plus 30 minutes

Materials

- “The Morel of the Story” article
- Graphic organizers on pages 4-5
- Postcard templates printed on card stock and cut (one postcard per student). Make sure the opposite side is blank
- Colored pencils, crayons, or felt markers

Background

In a strange twist of fate, your class has been transformed into the scientist or scientists they will read about in this article.

Day 1

Begin the class by having students read “Meet the Scientists.” Facilitate a class discussion about what they learned about scientists by reading this section. Talk about topics of interest to the scientists, scientist qualities, and what any written

experiences say about the scientist or scientists in general. As an option, you may print some of the scientist cards from <http://www.naturalinquirer.org> to enable students to read about additional scientists. The scientist cards could be provided to students up to a week before this lesson. (Note that every *Natural Inquirer* and *Investi-gator* article also includes a “Meet the Scientists” section that can be used to introduce a variety of scientists to students.)



In pairs, students will read the six main sections of the article. These sections are Thinking About Science, Thinking About the Environment, Introduction, Methods, Findings, and Discussion. For each section, one student in each pair will read three sentences out loud, and then the student's partner will read three sentences. Remind students to examine each figure as they come across its text reference. Each pair will discuss the section (and figures) and summarize what they learned, using two to three sentences written on the graphic organizer. Remind students that they need to try to put themselves in the scientist's or scientists' position as they read. When each section summary is complete, each "scientist" will write his or her answer to the following question: What are the two most interesting ideas in this section? Student pairs may review and answer the reflection questions as well.

Day 2: 30 minutes

Have student pairs reconvene and get their graphic organizers out. Have each pair briefly review their graphic organizer to remind them of the article.

Give each student a blank postcard.

Each student scientist will write a postcard to Ms. Thinkitout's science classroom at Everywhere Middle School. As a scientist, his or her goal is to share the article's research experience and knowledge with students. Students need to write in complete sentences, using proper grammar, spelling, and sentence structure. Remind students that they are writing a postcard, and that postcards are typically positive narratives describing an experience or learning.

On the back side of each postcard, each student scientist will draw a picture depicting something from the research.

Hang the postcards so that both sides can be seen. Use a string from the ceiling or some overhead object to about 5 feet from the floor, and then attach the postcards to each other using an open paperclip. Or tie a string across the corner of the room and hang the postcards from the string. As an alternative, identify a student group to develop a system for hanging the postcards.

Article Graphic Organizer

Article Name _____

Thinking About Science: Summary (two to three sentences)

Thinking About Science: What are the two most interesting ideas in this section?

Student name

Student name

Thinking About the Environment: Summary (two to three sentences)

Thinking About the Environment: What are the two most interesting ideas in this section?

Student name

Student name

Introduction: Summary (two to three sentences)

Introduction: What are the two most interesting ideas in this section?

Student name

Student name

Methods: Summary (two to three sentences)

Methods: What are the two most interesting ideas in this section?

Student name

Student name

Findings: Summary (two to three sentences)

Findings: What are the two most interesting ideas in this section?

Student name

Student name

Discussion: Summary (two to three sentences)

Discussion: What are the two most interesting ideas in this section?

Student name

Student name



Ms. Thinkitout's Science
Class
Everywhere Middle School
10 Discovery St.
Everywhere, GA 12345



Ms. Thinkitout's Science
Class
Everywhere Middle School
10 Discovery St.
Everywhere, GA 12345

	1	2	3	4
Thinking About Science	Accurately identifies the scientific concept and provides a 4-5 sentence summary	Accurately identifies the scientific concept and provides a 2-3 sentence summary	Identifies the scientific concept and provides a single sentence summary	Does not identify or summarize the scientific concept accurately, if at all
Thinking About the Environment	Accurately identifies the environmental issue or topic and provides a 4-5 sentence summary; identifies a possible problem to be solved	Accurately identifies the environmental issue or topic and provides a 2-3 sentence summary	Identifies the environmental issue or topic and provides a single sentence summary	Does not identify or summarize the environmental issue or topic accurately, if at all
Introduction	Accurately identifies the problem or question and provides a 4-5 sentence summary	Accurately identifies the problem or question and provides a 2-3 sentence summary	Identifies the problem or question and does not provide a summary, or identifies an inappropriate problem or question	Does not identify or summarize the problem or question accurately, if at all
Methods	Describes and justifies all procedures; explains all assumptions and reasons	Describes and justifies some procedures; explains reasons	Describes and justifies few procedures; seldom explains reasons	Does not describe, justify, or explain procedures; does not explain reasons
Findings	Accurately interprets evidence, statements, graphics, questions, etc.; fair-mindedly follows where evidence and reasons lead	Attempts to interpret evidence, statements, graphics, questions, etc., although not always accurately; fair-mindedly follows where evidence and reasons lead	Misinterprets evidence, statements, graphics, questions, etc.; regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions	Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others; Exhibits close-mindedness or hostility to reason
Discussion	Accurately identifies conclusions, implications, and consequences with a 4-5 sentence explanation; provides an objective reflection of own assertions	Accurately identifies conclusions, implications, and consequences with a 2-3 sentence evaluative summary	Does not explain, provides inaccurate information, or merely provides a list of ideas; or discusses only one area	Does not identify or evaluate any conclusions, implications, or consequences
Postcard	Accurately identifies and provides a 4-5 sentence explanation of contextual issues with a clear sense of purpose and scope	Identifies and provides a 2-3 sentence explanation of potential contextual issues	Does not explain contextual issues; provides inaccurate information; or merely provides a list	Does not identify or consider any contextual issues