## Lesson Plan

Core Connection



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

## Time needed

Two class periods

**Materials** (for each student or group of students):

- Natural Inquirer monograph or article
- Blank paper
- Writing utensil

In this lesson, students will develop nonfiction reading comprehension skills by identifying and describing keywords found within sentences, paragraphs, and sections.

## **Background**

Introduce the *Natural Inquirer* format to your students using information from the "Note to Educators." Introduce this *Natural Inquirer* article by providing a brief description of its topic. You may do this by focusing on the "Welcome to..." section. Have students read this section silently or in small groups. You may hold a class discussion about the topic.

After students have been introduced to the topic, explain that they exploring how to improve their reading comprehension for any expository or nonfiction text.

Review the following parts of speech with your students: nouns, adjectives, verbs, and adverbs. These are the most common parts of speech they will identify as keywords in this lesson.

You can use this poem to help students remember these four parts of speech. The poem was adapted from a slightly longer poem written by David B. Tower and Benjamin F. Tweed:

A noun's the name of anything, As: school or garden, toy, or swing. Adjectives describe the kind, As: great, small, quiet, or brown.

Verbs tell of something being done, To read, write, count, sing, jump, or run.

How things are done the adverbs tell, As: slowly, quickly, badly, well.

Begin with "Thinking About Science." You will help students by using this paragraph as an example of using keywords to improve reading comprehension. As students silently read, have them highlight, underline, or write on a separate paper the most important keywords or keyword phrases. Students may do this individually or in pairs. See the example that follows. In this example, keywords and keyword phrases are underlined. Note that students may identify different keywords and keyword phrases than shown in the example. You may want to use a white board or black board to guide students through this first paragraph.

Science is important to human society. Because humans are curious, they have always tried to explain things that are not easy to understand. Scientists explore mysteries from the depths of the ocean to outer space. Sometimes, scientists work to describe, understand, or explain what they have observed. Sometimes, scientists unexpectedly discover new information, facts, or events. One goal of science is to discover new relationships or things. Another goal is to explore what happened in the past. Still another science goal is to project what might happen in the future. In this research, the scientists were interested in how

humans might behave in the future. When science helps us to understand what might happen in the future, we can plan for a better future.

Now students will take their keywords and keyword phrases and rewrite them as concepts. Here is an example using the paragraph above:

Science: Important to society
Humans are curious
Scientists explore from ocean to outer space
Scientists describe, understand, or explain
observations
Discoveries sometimes unexpected

Science goals: Discover relationships or things; explore the past; project the future
This research: project future human behavior
To plan for a better future

Then direct students to use their keyword concepts to summarize even further. These summaries can be written as sentences. For example:

- Science helps society plan for a better future.
- Scientists are curious. They study anything and everything.
- Scientists describe, understand, explain, sometimes unexpectedly discover.
- Scientists discover relationships, things, past, future.
- In this research, the scientists projected human behavior.

After you have presented this example and feel confident that students understand how to identify keywords and keyword phrases and how to summarize paragraphs, move to "Thinking About the Environment." Students should also identify keywords or keyword phrases in the figures' captions and may identify key points about the figure. Guide students through this section. After students have finished this section, they should continue with the remainder of the article. You may want to assign students or student groups to individual sections. For example, one student or student group may read and summarize all sidebars. Another may read and summarize the "Introduction" section. Note that summaries should be completed for each

paragraph in the article.

After the entire article has been summarized in writing, have individuals or groups report to the class by sharing their summaries. These summaries may be combined into one document. Hold a class discussion about how this exercise helped students learn and remember concepts from the article. Then facilitate a class discussion about using keywords and keyword phrases to summarize expository and nonfiction texts.