

Lesson Plan for This Monograph

Time Needed:

One class period (50-60 minutes)

Materials Needed:

- 1 piece of plain white 8.5 X 11” paper for each student; 1 piece of plain paper for each group of 4 students
- 3 X 5” sticky notes (enough for at least 7 per student)
- A monograph for each student

In class the day before:

Give each student a copy of the monograph, a piece of plain paper, and three sticky notes. The sticky notes should be placed on the paper and labeled “Science,” “Environment,” and “Prediction.”

For homework:

Ask them to read “Thinking About Science” and “Thinking About the Environment.” After they read each section, have them write the main idea of the section on the correct sticky note. On the third sticky note, they should predict what they think the article will address. Ask them not to read ahead in the monograph, but to use clues from the two sections to help them predict. They should also review the glossary before coming to class.

In class:

Introduce the *Natural Inquirer* monograph to the class. Include information about the sections they will be reading. (See “Note to Educator, The Format of a *Natural Inquirer* Article” on page 10.) (5 minutes)

On your whiteboard or clean chalkboard, label three areas “Science,” “Environment,” and “Prediction.” Have each student place his or her sticky note in the correct area. Have a few

students read some of the notes, one section at a time. Hold a class discussion about the similarities and differences of the notes in each section. Have students identify what clues they used to predict what the article would address and how the scientists might address it. (8 minutes)

Read “Meet the Scientists,” “Introduction,” “Method,” “Findings,” and “Discussion” Sections as a class. When you reach the end of each section, have students write the main idea of the section on a labeled sticky note. For now, skip the reflection questions. When the article has been completely read and all sticky notes completed, have students place their sticky notes on the whiteboard, under the correct heading (Introduction, Method, Findings, Discussion). (18 minutes)

Now, have each student select one sticky note from each category. They must not select their own sticky note. Place students in groups of four. Each group should compare and contrast their sticky notes for each section. On a sheet of paper, one student will write the four headings and under each heading, write the main ideas of each section as agreed on by the group. Each section’s main ideas should be between 1 to 4 sentences long. (5 minutes)

Have each group read its main ideas for one or more sections (based on available time). Hold a class discussion to compare and contrast what each student group reported. (5 minutes)

Hold a class discussion about the research they have just read. What might happen to the environment in the future, given what they have learned? (5 minutes)

Make a list of actions they can take to reduce their carbon footprint (4 minutes). Examples include:

- Walk and bike more, ride in a car less.
- Eat more local produce; buy from local farmers' markets.
- Plant and maintain trees.
- Turn down the thermostat by 1-2 degrees in the winter.
- Turn up the thermostat by 1-2 degrees in the summer.
- Turn off appliances when not in use.
- Turn down the temperature in the hot water heater.
- Unplug your phones, etc., as soon as they have charged.
- Only do full loads in the dishwasher and clothes washer.
- Hang out clothes to dry.
- Consolidate car trips.
- Use energy-efficient light bulbs.
- Take shorter showers.

Day 2 (Optional): Do the FACTivity.

Lesson Plan Extension (This can be done in place of the FACTivity or as an extension on Day 3 if time allows.)

For homework, have students complete the reflection questions. They can use the same “sticky note” process to record their answers. In class on Day 2 (or 3, if you have done the FACTivity on Day 2), discuss their answers as a class. You may use the whiteboard to “mix up” the answers in the same manner as Day 1.