Name____



Purpose

Environmental issues appear in the simplest places. Suppose you buy an apple. Is the apple safe to eat? Did the farmer use pesticides to grow the apple? Did the apple cost less because of pesticide use? Are there trace pesticide residues on the apple? Pesticide use in crop production is an environmental issue.

State an issue as a question: fair to all sides and unbiased. An example of an issue statement is, "Are chemicals used for producing agricultural crops contaminating groundwater?"

Before people can address an issue, they need to know where the issue originated and what the key terms mean about the question. The terminology used in the question should have the same meaning to both sides of an issue, so all parties clearly understand it.

An issue can be analyzed by reviewing the risks and benefits of a decision surrounding an issue. Many times, decision-makers analyze the tradeoffs to make a decision. Tradeoffs involve giving up one thing for another by weighing the risks and benefits. For example, fertilizers increase the production from a cornfield, but the tradeoff is a risk of fertilizers percolating through soil and contaminating a water supply.

When deciding, use credible sources of information. Credible sources provide information proven as a fact about the issue rather than opinion. Opinions are one's own belief on an issue and cannot be proven. Decision-makers analyze the facts before taking sides on an issue.

How should you analyze an issue? What is a local environmental issue facing your community?

Materials

Per student:

- Device with internet access
- APA Citations
- Pen

ESI Notebook

Laboratory Notebook

Procedure

Analyze a specific environmental issue. Identify key terms, develop a list of related facts, and determine the risks and benefits. Then analyze a local issue of your choice.

Part One - Analyzing Pesticide Use

1. Record the following issue statement in your *Laboratory Notebook*.

"Should pesticides be used for producing agricultural crops?"

- 2. Identify the terms used in the question and record them in your *Laboratory Notebook*.
- 3. Read Concept 4 of Chapter 7, pages 144-146 of the text, Sustaining the Earth.
- 4. Skim Pesticide Use in U.S. Agriculture: 21 Selected Crops, 1960-2008 from the USDA.
- 5. Record any new terms from the reading that need to be defined.
- 6. Research the terms using your text and the internet.
- 7. Record the definition of the terms in your *Laboratory Notebook*.

- 8. Write a summary in your *Laboratory Notebook* explaining the origin of pesticide use.
- 9. Make a table like Table 1 in your *Laboratory Notebook*.

Table 1. Pesticide Use

Risks	Benefits

- 10. List three facts about the benefits of using pesticides and three facts about the risks of using pesticides in your *Laboratory Notebook* table. Leave space to add more information to the table during later activities.
- 11. Record the source(s) of the facts listed in the table.

Part Two - Local Issue

- 1. Select one issue from the list made in Activity 1.1.4 What's the Issue?
- 2. State the issue as a non-biased question and record in your Laboratory Notebook.
- 3. Use the internet and textbook to define key terms used in the question.
- 4. Use a computer with internet access to research the history and origin of the issue.
- 5. Summarize the origin and history of the issue in a short paragraph.
- 6. Record the risks and benefits surrounding the issue in a new table like Table 1. Leave space on the page for additional risks and benefits to be added during later activities.
- 7. Record and define any additional terms people would need to understand to determine your opinion on the issue.
- 8. Document all resources used in APA format. Refer to the APA Citations document.

Conclusion

- 1. How do you analyze an issue?
- 2. Why is it important to know the history of an issue?
- 3. Why should an issue be stated as an unbiased question?
- 4. Why should only credible sources of information be used to analyze issues?