



Learning Project **7** Drawing Conclusion From the Text

Inquiry Activity 7-2: Combining Information to Draw Conclusions

There are five items in this Inquiry Activity, all characterized by short, two or three-sentence passages with strong information from which the test taker must derive the correct conclusion. As we consider these, we do not separate the passage from the answer choices, but take the item as a whole.

(Note: Italicized portions should be directed to the students.)

1. Identifying the Problem (Items 4, 14, & 18 Science PA; 3 & 4 Social Studies PA)

Look at each test item.

What must you do in order to answer the questions correctly?

Where else have you seen questions like this?

If you have not already done so, have your learners take a look at Reading IA 1-1, “Identifying Types of Questions.”

What will you have to do to be successful in this Activity?

Got down your thoughts, or share them with your partner.

Correct choices are starred for teachers.

Science 4

At high altitudes, the atmosphere contains fewer molecules per unit volume of air than it does at low altitudes.

For which reason may people experience shortness of breath more quickly at the top of a mountain than along a seashore?

- (1) a slower pulse rate
- (2) a great gravitational force on the body
- (3) a lower percent of oxygen in the blood **
- (4) a faster heartbeat
- (5) a slower circulation of blood

Science 14

Smokestacks used by industries that burn coal or oil often give off sulfur dioxide as a by-product. Sulfur dioxide reacts with the oxygen in the air to form sulfur trioxide. Sulfur trioxide then combines with the water in the air to form sulfuric acid.

What is the most prominent atmospheric consequence of this series of chemical reactions?

- (1) The atmosphere is polluted with substances that are harmful to humans and to the environment. **



- (2) Plants that require a basic soil with a high pH level thrive.
- (3) The atmosphere becomes less polluted because sulfuric acid dissolves all particles in the air.
- (4) Marine life reproduces faster because of the increasing acidity of the water.
- (5) Increased sulfur dioxide emissions have little effect because wind blows the emissions away.

Science 18

The force of gravity causes objects to fall toward Earth, but it is commonly observed that a feather falls more slowly than a penny. However, when a feather and a penny are placed in a chamber where all the air has been removed, they both fall at the same rate.

These observations indicate that:

- (1) the shape of the feather causes gravity to have less force
- (2) metals fall faster than feathers even when no air is present
- (3) air resistance will cause the feather to fall more slowly **
- (4) air resistance acts more on the penny than on the feather
- (5) both the feather and the penny fall more slowly in a vacuum

Social Studies 3

The United States generates 4.5 billion pounds of toxic waste each year. Much toxic waste is composed of cancer-causing chemical compounds that remain after the production of chemicals, paper, metals, and plastic.

Based on this information, what does improper disposal of toxic waste in the United States most likely produce?

- (1) poisoned water supply **
- (2) a fuel crisis
- (3) decrease in illness
- (4) fertile soil
- (5) recycled materials

Social Studies 4

Some large companies use vocational retraining programs to teach people to do work that is different from their present jobs. The retraining is often necessary because some employees' jobs are no longer needed to make a company's product.

What is the main purpose of these programs?

- (1) to encourage people to leave the company
- (2) to improve the quality of products
- (3) to increase the salaries of employees
- (4) to make it possible for people to continue to work **
- (5) to promote people to higher paying jobs.



2. Becoming Familiar with the Problem

Scan the items, and ask yourself questions like the following as your first step to identifying the question.

Is there anything in the items you do not understand?

What vocabulary might you need to have clarified or defined?

What items do you think you can answer without having unfamiliar words defined for you?

The science passages have very specific vocabulary in each passage. In most cases, if the words are understood, the test takers will be able to answer the questions readily.

What are the questions asking you to do?

In each case, the question asks the test taker to use the information in the paragraph to draw a conclusion.

3. Planning, Assigning, and Performing Tasks

Planning: *You may decide to work by yourself, in a pair, or a small group to do this Activity.*

Assigning: *If you are working with a partner, decide how you will carry out the task of answering the question.*

Doing the Work: *As you read the questions, do the following:*

Scan the items; find and mark any words in the paragraphs or the answer choices you might not know. See if the passages give you enough information to clarify the meaning of the words. If not, ask someone or look up what the words mean.

Science passages will have technical or specific vocabulary challenges. In this case, also, social studies item 3 about pollution may pose some vocabulary challenges as well.



What words in the questions show you what the questions are asking you to do?

For test takers, words such as **reasons, consequences, show** or **indicate, purpose, or based on this information**, are clues that they will need to draw conclusions.



Also, each of the questions refers the test takers specifically to the reading passage, which shows them they will need to read that small passage carefully.



Determine which answer choices are correct.

For Science item 4, choice (3) is the only choice that refers in any way to air (oxygen). Three of the choices refer to the same thing, circulation or pulse. Multiple references are usually an indicator that they can be eliminated from consideration, and choice (2) refers to gravity, which does not appear in the passage.



For item 14, the correct answer is the very general choice (1). Often the most generic answer is the correct one. Whatever the correctness of choices 2 through 4, they are not mentioned in the passage, which is about air. Choice (5) identifies one of the difficulties in dealing with the problem of acid rain: that the damage is at considerable distance from where the pollution occurs. That is more a political consequence. Many people would find this passage easier to understand if the term **acid rain** had been used. You may be able to find useful newspaper articles or online sources to build interest.

For item 18, the correct choice is (3). The resistance of the air will affect the lighter feather more than the denser coin. You could conduct an experiment here dropping objects of different weights, including a sheet of paper. The paper will exhibit a response to air resistance similar to that of a feather. If you or the class is so inclined, a burst lecture about the properties of vacuums or differing resistance of water and air might make the point clear.

For item 3, understanding that **toxic** and **poisonous** are synonymous will lead to the correct choice (1). Improper disposal



of toxic waste clearly will not lead to fertile soil or a decrease in illness, it has nothing to do with a fuel crisis, and recycling is an alternative to disposal.

Social Studies 4 is correctly answered by choice (4.) There is no mention in the passage of salary increase or promotion, only retraining brought on by differing needs. It is not logical for a company to retrain someone it will be laying off, and while quality control is likely a by-product, it is not mentioned as a reason for retraining.

4. Sharing with Others

Telling people what you know helps you understand the material better. Take this opportunity not only to share the knowledge, but also to learn it more completely.

Small groups: Compare the answers you found with others in the group. Discuss the methods you used to find the answers, the support for your answers in the passages, and the reasons each learner thinks his/her answers and support are correct.

Agree on the correct answers and the strategy you would use for answering questions that ask you to draw conclusions from what you have read.

Whole class: Share with the whole class the steps you used to answer the questions. Take notes on any different ways of answering the questions other groups gave.

5. Reflecting, Extending, Evaluating

Reflecting: Think about what you have learned.

Here are some questions to start your thinking about the experiences you just had. Thinking about what you have learned and experienced is part of the learning process. When the focus is only on the answer, you don't get much time to think about what was learned.



1. *What does it mean to you as a test taker to be able to recognize what the question is asking you to do?*
2. *Do you find it easy or difficult to draw conclusions from these short passages? Explain.*
3. *Do some of the questions seem easier to you than others? Explain.*
4. *Are these short passages easier or more difficult than the longer passages that have a group of questions based on the same reading?*
5. *What techniques did you use to answer the questions in this Activity?*

Extending: Extend what you learned to new situations.

In extending, you are being asked to transfer the information presented in this Inquiry Activity to other information or situations.

1. *Using reference materials provided by your instructor, or that you have located yourself, write an essay about a local environmental issue that has attracted your interest.*

Most localities have had a widely publicized issue, whether it is strip mining, mountain reclamation, landfill issues, damaged waterways, or clear-cutting of trees. Improper disposal of wastes, both farm and manufacturing, has also had its share of interest.

2. *In your groups, use paragraphs from your essays to write multiple-choice questions that require drawing conclusions.*
3. *Exchange questions with other groups and answer each others' questions. Discuss as a class how you came up with the correct answers.*
4. *Your instructor will provide materials and directions for science experiments. After you and your group have done the*



experiment, write an explanation of what you did and what it shows.

A variety of easy and inexpensive science experiments appear in Appendix E. This particular extension activity could be repeated each time you have a hands-on science class. Writing up the step-by-step procedures and telling what the entire activity shows is an excellent practice for developing clear writing.

5. *Among your group or class, identify people who have participated in re-training programs. Find out what their experiences have been. Discuss as a group the advantages of such programs.*

Some of your participants may be involved in job readiness programs. Their information will provide some interesting discussion. You may want to have a panel discussion or a debate identifying the pros and cons of such programs.

You could have a guest speaker come in and talk to the class. Speakers could be drawn from the local Virginia Extension Service or the Virginia Department of Forestry, DEQ, etc. Go to: www.vanaturally.org for a list of available speakers.

Evaluating: Assess what you learned and how you learned it.

In this last step, you get a chance to review the content of what you learned and the methods used to learn. These questions have no right or wrong answers. This is your chance to look more closely at your learning style and the opportunity to state how you benefited or did not benefit from the content and/or the methods presented in this IA.

1. *What parts of the activity worked best for you? Explain.*
2. *What parts did not work well for you? Explain.*
3. *What ideas in this Inquiry Activity will you use when taking the GED test? Why?*
4. *How does following this 5-step format make you feel?*