

BEWARE OF POISONS

Performance Standard 13A/11A.E

Students will explore appropriate principles of safety accordingly:

- *Knowledge*: Recognize kinds and sources of poisons in classroom, outdoor and home settings.
- *Application*: Relate kinds and sources of potential poisons and responses for personal application.
- *Communication*: Explain how to recognize and respond to potential poisons in real-world situations.

Procedures

1. ***In order to know and apply accepted practices of science(13A), and know and apply the concepts, principles and processes of scientific inquiry (11A)***, students should experience sufficient learning opportunities to develop the following:
 - Researching pertinent resources to identify various methods of poisoning.
 - Recognize examples of poisonous plants, animals and chemicals which can be regularly found in school, home or outdoor settings.
 - Describe the appropriate first aid responses and appropriate actions in multiple likely scenarios.
 - Organize and display data about effect of different poisons.
 - Summarize data from classroom groupings of poison types, sources, effects and responses.
 - Communicate findings about poisons.
 - Generate additional questions that can be investigated.
2. Have students review and discuss the assessment task and how the rubric will be used to evaluate their work.
3. Begin inquiry investigation about types, sources, effects and responses of poisons by creating generalized question pages (What are the main types of poisons? What are the main sources of poisons? What are some examples of each type? How do poisons work? How can you prevent poisoning? What is the first aid for different kinds of poisons? etc.) Ask students to quickly write one, two or three word answers to these questions on index cards and place them on the question pages as the beginning of semantic maps. Divide the class into groups which will be assigned to complete research into the types of poisons. The types could be according to the sources (plants, insects, snakes, spiders, ordinary chemicals, etc.) or method (stings, bites, contact, inhalation, ingestion, etc.) or general locations (forests, rivers or lakes, tropical or temperate (etc.) ecosystems, home storage areas, etc.) Provide access to internet, Regional Poison Control Center, library or classroom materials. Require students to present their type of poison with associated examples (with pictures), actions, prevention methods and first aid responses for a group report for classroom discussion. Encourage students to offer comparisons and contrasts of information about poisons. Return focus to original question pages and semantic maps to consider additional answers (on index cards) and questions for further study.
4. Ask each student to research one of these additional questions and write a one-page report for an individual grade.
5. Evaluate each student's work using the Science Rubric as follows and add the scores to determine the performance level:
 - *Knowledge*: Identification of kinds, sources, effect of poisons and first aid responses are appropriate and correct,
 - *Application*: Research materials (from group effort) were thorough and accurate; comparison and contrast assumptions are accurate, and
 - *Communication*: Research materials and presentation of group report for recognition, responses and real-world applications, as well as, individual research are complete and thorough.

Examples of Student Work not available

Time Requirements

- one class period for generalized questioning activity; 2-3 class periods for group research and presentations; 1-2 class periods for generation of additional questions and individual research.

Resources

- Colored index cards
- Access to informational resources
- Science Rubric