

SOLVING ENVIRONMENTAL PROBLEMS

Performance Standard (16EUS/17B).C

Draw a picture of an environmental problem in the community and a picture of a possible solution(s) and write a short explanation of the importance of the solution(s) for the community:

- *Knowledge*: identify a community environmental problem and possible solutions;
- *Comprehension*: analyze the connection between the problem and the solutions and the importance of it to the local community; and
- *Communication*: draw a picture that is well-organized well-focused, and well-detailed; express all ideas in a way that provides evidence of knowledge and reasoning processes.

Procedures

1. ***In order to understand Illinois, United States, and world environmental history (16EU), and analyze and explain characteristics and interactions of the Earth's physical systems (17B)***, students should experience sufficient learning opportunities to develop the following:
 - Analyze a graph or chart containing data that shows changes in aspects of the physical environment over time, and
 - Identify examples in the local community of ways in which the physical environment is harmed by human activities.
2. Have students review and discuss the following assessment task and how the rubric will be used to evaluate their work.
3. Show sample graphs, maps and charts concerning environmental changes that are harming the earth and its people today (i.e., forest destruction, ozone depletion, greenhouse effect, waste pollution, water pollution, acid rain, habitat destruction). Have students analyze the graphs, maps and charts looking at the causes of the problems and possible solutions.
4. Discuss with students the causes and solutions and list the students' responses.
5. Discuss environmental problems in the community and make a list of students' responses.
6. Have students divide a 11x17 drawing paper into quarters.
7. Have the students choose an environmental problem that affects the community today and one that affects the whole Earth.
8. Have students draw a picture in color of the community problem on first quarter of the drawing paper and add a title.
9. Have students draw a color picture illustrating a solution or solutions for the problem on the next quarter of the paper.
10. Have students draw a picture in color of the world-wide problem on the next 1/4 of the drawing paper and add a title.
11. Have students draw a color picture illustrating a solution or solutions for the world-wide problem on the last quarter of the paper.
12. Have students write an explanation of the importance of the solution or solutions for the community and the worldwide at the bottom of the paper.
13. Evaluate each student's work using the Social Science Rubric as follows and add the scores to determine the performance level:
 - *Knowledge*: the identification of a community and world-wide environmental problem and solution to the problems is complete and accurate.
 - *Reasoning*: the picture and explanation shows the connection between the problem and the solution and its importance is well-reasoned and logical.
 - *Communication*: the drawing and explanation was well-focused, well organized and well-detailed; the knowledge and reasoning are completely and effectively communicated.

Examples of Student Work follow

Time Requirements

Two class periods

- **Resources**
- 11x17 drawing paper
- Crayons or markers
- Charts and graphs concerning environmental issues
- Board space or chart paper
- Internet sites
 - www.btinernet.com/~mike.ferris
 - www.worldwatch.org
- Social Science Rubric

Environmental Problems

community problem

people cut down trees to put up buildings



Community solution

don't cut down trees!!



World-wide problem

people Kill animals for fun



World-wide solution

it better to keep the animals alive



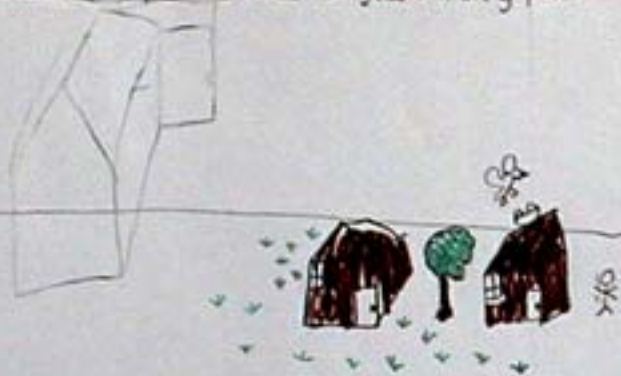
Don't kill animals for fun because they will get extinct.

If you don't cut down trees animals will stay alive because birds and other animals have their home in trees.

"Exceeds"

Environmental Problems

[Community problem] Birds making nests in wrong places.



[Community Solution]



World-Wide Problem diseases



World-Wide Solution



Build more birdhouses because the bird will go into the birdhouse instead your garage or your places where you don't want them to go.

They should test more medicin on diseases because many people are getting sick and there's no cure for it and they might die because there is no cure.