The Return of the Cuyahoga

Objective 3, Lesson 1

COMMUNTIY ACTION PLAN

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GRADE LEVEL: Middle grade

GOALS: The students will develop and implement an action plan for there community, with regards to the environmental issues that they have been taught through the *Return of the Cuyahoga* River curriculum.

LEARNING OBJECTIVES:

1. The students will work independently or cooperatively to design a community action plan based upon the Cuyahoga River.
2. The students will implement their plan in the home, their school, the local community, or online.
3. The students will evaluate the effectiveness of their plan.

STATE OF OHIO STANDARDS:

Earth and Space Science

BENCHMARK

Describe the interactions of matter and energy throughout the lithosphere, hydrosphere, and atmosphere (e.g., water cycle, weather, and pollution).

PERFORMANCE INDICATORS

-Explain that Earth's capacity to absorb and recycle materials naturally (e.g., smoke, smog and sewage) can change the environmental quality depending on the length of time involved.

-Analyze data on the availability of the fresh water that is essential for life and for most industrial and agricultural processes.

- Describe how rivers, lakes, and groundwater can be depleted or polluted becoming less hospitable to life and even becoming unavailable or unsuitable for life.

INTERDEPENDENCE OF LIFE

BENCHMARK

Summarize the ways that natural occurrences and human activity affect the transfer of energy in Earth's ecosystems

PERFORMANCE INDICATORS

-Investigate how overpopulation impacts an ecosystem.

Technology

BENCHMARK

Give examples of how technological advances influenced by scientific knowledge, affect the quality of life

PERFORMANCE INDICATORS

-Explain how decisions about the use of products and consequences (e.g., social and environmental).

-Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other.

-Examine how choices regarding the use of technology are influenced by constraints caused by various unavoidable factors (e.g., geographic location, limited resources, social, political and economic considerations).
-Design and build a product or create a solution to a problem given more than one or two constraints.
-Evaluate the overall effectiveness of a product design or solution.

Ethical Practices

BENCHMARK
Give examples of how thinking scientifically is helpful in daily life.

PERFORMANCE INDICATORS
-Identify ways scientific thinking is helpful in a variety of everyday settings.
-Describe how the pursuit of scientific knowledge is beneficial for any career and for daily life.
-Describe how the work of science requires a variety of human abilities and qualities that are helpful in daily life (e.g., reasoning, creativity, skepticism, and openness).

MATERIALS/RESOURCES

Community Action Plan Proposal Scoring Rubric, paper, pencil, markers, chart paper, chalkboard, colored pencils, poster boards, display boards, graphs/charts/data tables of field results, copy paper, computer access (publishing programs), copy machine, colored paper, and printer.

Suggested Websites for environmental issues

http://www.epa.gov/owow/nps/whatudo.html (U.S. EPA)
http://www.epa.gov/owow/nps/abc.html (U.S. EPA)

http://www.epa.gov/owow/nps/dosdont.html **(U.S. EPA)**
http://fi.edu/guide/schutte/water_overview.html
http://www.peacecorps.gov/wws/students/service/projideas/menu.html#top **– Service projects ideas.**

PROCEDURE:

1. Review with the class the environmental issues that are surrounding the Cuyahoga River. List the issues on the chalkboard or chart paper.
2. Ask the students to think about solutions to these issues. List them on the chalkboard/chart as well.
3. Ask the students what small or simple thing a community can do to improve the quality of water in the Cuyahoga River.
4. Allow the students to discuss in small groups some of their ideas.
5. Inform the students that they are responsible for developing a plan of action to improve the quality of water in the Cuyahoga River. They may work alone or in groups of 2 or 3.
6. Each group is to choose an environmental issue to further investigate. If possible, each group should choose a different issue.
7. They should also determine their target group. (Family & Friends, the School, the Local Community, or the world via the Internet.)
8. The students will create a rough draft of their plan. They will include any and all information that they have learned about the Cuyahoga River.

Suggested Action Plan

- A Poster/ Sign Campaign
- An informational flyer
- An informational web page
- A letter writing campaign to government, city, residents and/or school officials.
- An informational presentation to classmates, parents, or target group
- A clean-up campaign in a local community

9. Within a week of choosing their environmental issue, the students should present a plan proposal to the class. The class will decide if the plan should be implemented. The students will use the ***Community Action Plan Proposal Scoring Rubric*.** If it is determined that a plan in unsuitable, the student/group will have two days to make changes to their plan.
10. After the class has approved the plan, the students will have a week to begin implementation of their plan. *
11. The teacher should obtain approval to implement plans that require mailing or presentation. The parents will need to be aware the community action plans so that they can assist students if necessary. The teacher should receive written consent from parents. Remember to discuss any poster/sign campaign with principal and city leaders.
12. The Community Action Plan should go into effect for one or two weeks. *
13. While the plan is being implemented, the students should develop a survey or a poll to determine the effectiveness of their plan.
14. The students will report the effectiveness of their plan to the class. The students will discuss different approaches taken, problems they experienced, and successes.

**The amount of time spent on the development and implementation of the community action plan is determined strictly at the discretion of the classroom teacher. The plan should take 3-6 weeks for development and implementation.*

PROCEDURE

1. A Community Action Plan Proposal
2. Implementation of the Community Action Plan
3. Develop a survey, poll, or questionnaire to evaluate the Community Action Plan
4. Produce written documentation of their experience and the end results

ASSESSMENT:

The students will write a project summary of their community action plan. The students will describe what they planned to, what they did, and how they felt about their projects. The students will write about how this experience positively or negatively changed their lives and their community. The student will include any information from their field investigations that influenced the community action plan and their views about the environmental issues that impact the Cuyahoga River.

COMMUNITY ACTION PLAN PROPOSAL SCORING RUBRIC

Student/Group Members

_____

Environmental Issue

_____

During the presentation, did the student/groups address the following?

Who is the target group?	
How do they plan to attract the attention of this group?	
What behavior do they hope to change in the target group?	
How do they plan to convince the target group that the change will be beneficial to the environment?	
How will they know that a change has occurred?	
Is any information obtained during the field investigation presented in the plan?	
Are they offering any visual product?	

(posters, signs, charts, graphs)	
Have they included solid facts about water quality and the Cuyahoga River?	
Does the plan sound feasible?	

Should the student/group be allowed to implement their community action plan?

If no, what are some changes that need to be considered before it is implemented?