

Unit Title: Save the Planet

Established Goals:

First Grade Science

- **1.ESS.4** Develop solutions that could be implemented to reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
- **SEPS.6 Constructing explanations (for science) and designing solutions (for engineering)** Scientists and engineers use their results from the investigation in constructing descriptions and explanations, citing the interpretation of data, connecting the investigation to how the natural and designed world(s) work. They construct or design logical coherent explanations or solutions of phenomena that incorporate their understanding of science and/or engineering or a model that represents it, and are consistent with the available evidence.

	Alignment	
Objective	Performance Assessment	Test Item(s)
Identify ways pollution is caused		6, 11, 12, 13, 14
Identify types of pollution		9, 12, 13, 14
Identify ways pollution can be prevented		7, 8
Identify how pollution effects living things, water, air, and land		1, 2, 3, 5, 10
Create ways to help eliminate pollution in daily life	X	15

Pre-Assessment

Name: _____

Directions: This is a test for me to see how much you already know about saving our planet! Please try your best and if you do not know an answer just put your best guess. This is a NO STRESS test. Circle the correct response or write it in the blank that is provided!

1. What does our environment consist of?
 - A. My home
 - B. My school
 - C. The town/city I live in
 - D. All of the above

2. Which item causes air pollution?
 - A. Car
 - B. Pencil
 - C. Bird

3. Does pollution have negative or positive effects on your health?

4. What does pollution effect?
 - A. Air
 - B. Water
 - C. Land
 - D. Living things
 - E. All of the above

5. How can we help stop pollution?
 - A. Walk
 - B. Drive cars
 - C. Help a friend

6. True or False: Pollution can make me sick.

Unit Test

Name: _____

Directions: Do your best on this test! For the matching questions draw a line to connect the two items that go together. For short answer questions write your answer on the line given. For multiple choice and true/false questions circle the answer you think is right!

Good luck!

Matching: Draw a line to connect the matching items.

- | | |
|-------------------|--------------------------------------------------------------------------------------------|
| 1. Asthma | A. Harmful things in the air, water, or
land that hurts humans, animals, and
insects |
| 2. Oxygen | B. A lung problem that CAN be caused by pollution |
| 3. Environment | C. Where I live |
| 4. Carbon Dioxide | D. The air that I breathe OUT is this type of gas |
| 5. Pollution | E. The air that I breathe IN is this type of gas |
| 6. Deforestation | F. Turning waste into something new |
| 7. Recycling | G. Cutting down forests to make paper |

8. Write 3 ways to help create a healthier environment:

9. Which is a type of pollution?

- A. Deforestation
- B. Driving cars
- C. Water pollution

10. What is a result of air pollution?

- A. Acid rain
- B. A hole in the ozone
- C. Climate change
- D. All of the above

11. What is a cause of pollution?

- A. Wasting paper
- B. Keeping the kitchen sink running
- C. Driving a car
- D. All of the above

12. Write one way that water pollution occurs.

13. Write one way that air pollution occurs.

14. Write one way that land pollution occurs.

15. Essay: Write 1 paragraph about why protecting our environment is important.

Performance Assessment

Directions: Write a storybook with the paper provided about pollution and the negative effects on the environment. Please include what you should do to help get rid of pollution and how you are able to make this problem go away in your own life. These can be ideas you have already heard of or ideas that you come up with all on your own! Make sure to draw pictures AND to write sentences about pollution in your storybook. Please be creative!

Rubric for the Performance Assessment

	Needs Work	Good job	Awesome	Points
	1	2	3	
<i>Understanding</i>	Does not appear to understand the negative effects of pollution. Does not use any evidence/knowledge to back up claims on familiarity with pollution.	Somewhat understands the negative effects of pollution. Sometimes uses evidence/knowledge to back up claims on familiarity with pollution.	Fully understands the negative effects of pollution. Uses evidence/knowledge to back up claims on familiarity with pollution.	
<i>Writing/Pictures</i>	A multitude of writing errors and none/ almost pictures to explain ideas.	A few writing error and uses some pictures to explain ideas.	Little to no writing errors and uses pictures to explain ideas.	
<i>Solutions</i>	Develops no solutions to help eliminate pollution in their own life and/or on Earth.	Develops a minimum of one solution to help eliminate pollution in own life and/or on Earth.	Develops a minimum of two solutions to help eliminate pollution in own life and/or on Earth.	
				Total: /9

Answer Key

Pre-Assessment:

1. D
2. A
3. Negative
4. E
5. A
6. True

Unit Test:

1. B
2. E
3. C
4. D
5. A
6. G
7. F
8. Example response(s) may include:
 - Recycling
 - Do not waste water
 - Walk or ride bicycle
9. C
10. D

11. D

12. Example response(s) may include:

- Putting trash in the ocean

13. Example response(s) may include:

- Driving a car

14. Example response(s) may include:

- Not recycling
- Littering

15. Example idea(s) that may be included in the essay:

- Prevents us from getting a disease
- Helps keep animals safe
- Saves trees

Grading Scale

Matching Questions: 1 point each

Multiple Choice Questions: 1 point

True/False Questions: 1 point

Short Answer Questions: 1 point for every correct blank filled in

- For example: If the question has 3 blanks it is worth 3 points

Essay: 10 points

- 5 points for writing a paragraph
- 5 points for thoughtful ideas on why it is important to protect our environment

Pre-Assessment: Not for Grade

Unit Test: /20

Performance Assessment: /9

Total Points Possible from Save the Planet Unit: 29

Reflection

The goal of the EDPS 345 assessment unit project was to create a successful assessment unit that can be easily implemented into any classroom but specifically a Moderate/Severe Special Education classroom. I deliberately wrote the questions to help the students critically think about what I have taught. This project was helpful practice to be able to incorporate set state and core standards into an assessment. Consequently, I have learned in the course EDPS 345, that it is extremely important for all assessments to be valid and reliable in order to monitor student's progress effectively.

References

Clean Air, Healthy Children: Teachers Guide and Activities for Young Children. (2012).

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