



Name: _____ Date: _____

Student Exploration: Water Pollution

Vocabulary: bacterial pollution, nutrient pollution, sediment pollution, toxic pollution, water pollution

Prior Knowledge Questions (Do these BEFORE using the Gizmo.)

1. **Water pollution** is the addition of harmful substances to water. Some of these substances are found at home. What household chemicals might be harmful if not disposed of properly?

2. What are some other causes of water pollution? _____

Gizmo Warm-up

The *Water Pollution* Gizmo will teach you about some of the main kinds of water pollution. On the TYPE tab, under **Types of pollution**, check that **Toxic** is selected. Read the paragraphs on the right and bottom of the Gizmo.

Types of Pollution


- Toxic
- Sediment
- Nutrient
- Bacterial

1. What is **toxic pollution**? _____

2. What are some examples of toxic pollutants listed in the Gizmo? _____

3. Can you think of other examples of toxic substances, not listed in the Gizmo? _____



Activity A: Types of water pollution	<u>Get the Gizmo ready:</u> <ul style="list-style-type: none"> • Check that the TYPE tab and Toxic pollution are selected. 	
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Question: What are the main types of water pollution?

1. Read and learn: Besides toxic pollution, the other types of pollution are **sediment pollution**, **nutrient pollution**, and **bacterial pollution**. You have already described toxic pollution on the previous page. Read about the other types, and describe each in your own words.

Sediment pollution

Description: _____

Causes: _____

Consequences: _____

Nutrient pollution

Description: _____

Causes: _____

Consequences: _____


Bacterial pollution

Description: _____

Causes: _____

Consequences: _____



Activity B: Real-world examples	<u>Get the Gizmo ready:</u> <ul style="list-style-type: none"> • Select the EXAMPLE tab. • Check that example 1/12 is selected. (If not, use the arrow buttons to get to example 1/12.) 	
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Question: What are the real-world causes of water pollution?

1. Practice: For each **Real-world example** presented in the Gizmo, guess which type or types of pollution will result by checking the boxes. When you are ready, click **Check answer** to see if you were right. Read the explanation, and then use your own words to fill in the table.

Example	Pollution type(s)	Explanation
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

(Activity B continued on next page)



Activity B (continued from previous page)

2. Practice: Classify each of the following examples as toxic, sediment, nutrient, and/or bacterial pollution. Explain your classifications.

A. Logging removes trees from a hill, leaving a barren landscape.

Classification: _____

Explanation: _____

B. A man washes clothes in a stream using a detergent that contains phosphorus.

Classification: _____

Explanation: _____

C. At an old gas station, gasoline leaks from an underground storage tank.

Classification: _____

Explanation: _____

D. At a research lab, a scientist carelessly pours cultures of living microbes down the drain.

Classification: _____

Explanation: _____

3. Think and discuss: Many sources of water pollution are found within the home. What actions can you take to reduce water pollution? _____

