

Lesson 10 - Clean Water & Cause and Effect

Grade 3

Rationale:

Through a hands-on example, students will see how dirty water is filtered to make clean water. They will be lead in a class discussion on the importance of having clean water. In this lesson, students will also learn how to identify cause and effect. A graphic organizer will be used to show how a cause makes something happen and an effect is what happens.

Objectives:

- During a demonstration with real objects, students will learn how a filter helps clean the water that we drink.
- During classroom discussion, students will be able to identify a cause and/or an effect within an article.

Allentown School District Standards:

S4.B.1.1.3: Describe basic needs of plants and animals (e.g., air, water, food).

S4.B.3.3.1: Identify everyday human activities (e.g., driving, washing, eating, manufacturing, farming) within a community that depend on the natural environment.

Materials:

- 1 jar dirty water
- 1 clean empty jar
- Coffee filter
- Large mouth funnel
- Paper towels
- Textbook page 149
- Cause and Effect graphic organizer
- Cause and effect worksheet (extra, if time permits)

Introduction:

(Students at rug in a large circle)

- Show students jar with dirty water.
- Ask if they think this would be good to drink... probably not.
- Water can contain germs that make people sick.
- It may also contain dirt or salt that can harm machines that use water.
- People must filter the water to remove the dirt, germs and salt.
- Let's try to filter water here in class. Show supplies:
 - empty jar, funnel, coffee filter (these will trap the dirt and let the clean water come through)
 - pour water slowly into the empty jar through the coffee filter
 - have students notice how much cleaner the second jar is.

Procedures/Strategies:

- Explain that this is similar to the way water is filter to be used at our homes.

- Some people have filter their own water b/c they don't live in the city -- like me.
- In Allentown, people don't have to filter their own water -- the city has a water-treatment area where they filter the water before it comes to your house.
 - They remove the dirt and chemicals that are in the water before it comes to you.
- Having clean water is important because
 - Germs found in the water can make people sick
 - Dirt and salt in water can hurt machines that depend on the water to run.
- Directions for rest of class:
 - When I call you go back to your seat
 - Take out textbook turn to page 149
 - Read over that page quietly with your partner.
 - Have paper passer hand out graphic organizer

- p. 149 Read cause and effect whole group.
- Explain cause - makes something happen
- Explain effect - what happens (the result)
- Point out key words like "such as, because, so, since, and as a result"
 - infer: to make a conclusion or make a reasonable guess based on what you already know; use context clues
- example: Third grade is loud in the hall, as a result, Mrs. Walls' class is not able to learn today's lesson.
- examples that they can relate to: This marking period I studied really hard for test. I also paid attention in class. As a result, I got straight A's on my report.
- Read Clean Streams article (middle page 149)
 - Go through and find the three causes and the effect
 - Record on chart paper graphic organizer as students record on their sheet.

Accommodations:

Seating chart is adjusted so that students will be seated heterogeneously. This is so high-level students can model for lower-level students especially when lessons involve partner reading. Partners will be next to each other, so they can easily share books.

Closure: (5-10 minutes - 12:15)

- Add Cause and Effect to our word wall
- (if time permits) Give students the cause and effect worksheet.
 - Have students work quietly with their partner. Collect these at the end of class.

Evaluation (students):

Classroom observation - Was anyone off task? How did students participate?

Next Step:

Due to severe weather drill, science was cut short. Cause and effect were only briefly discussed. I do not feel we covered enough to include the one cause and effect question on the test.

Evaluation (self):

Once again, students were actively engaged in the lesson at the rug when we were filtering the dirty water. I have found that bringing in real examples for some science topics helped a lot with the lesson. I didn't feel as though I needed to run to the book to read, because our discussion went along with most of what the text would have talked about. Keeping students engaged is more important than reading through the textbook. I used the content in the text to ask questions during our discussion.

Name: _____

Directions: Use the graphic organizer below to list three causes and an effect from the science article, *Clean Streams*, on page 149.

Causes

Effect

