

FFL Principle 8- Reduce Stormwater Runoff Elementary School

Glaribel Piñero-Amaro, Greenacres Elementary School

Program Type: In class activity Duration: 1 hour

Grade Level: First Grade – Dual Language (Spanish)

Standards:

SC.1.E.6.1 Recognize that water, rocks, soil, and living organisms are found on Earth's surface.

ELA.1.V.1.1 Use grade-level academic vocabulary appropriately in speaking and writing.

SC.1.L.14.1 Make observations of living things and their environment using the five senses.

SC.1.L.17.1 Through observation, recognize that all plants and animals, including humans, have the need for basics, like air, water, food, and space.

ELA.1.V.1.3 Identify and use picture clues, context clues, word relationships, reference materials, and/or background knowledge to determine the meaning of unknown words.

Learning Objective: Students will explore how plants near lakes and rivers keep soil in place and make the water cleaner and safer when the stormwater is being taken care of properly.

Guiding Questions: What happens to rain when it can't soak into the ground?

Intended Outcomes

As a result of the program, what I want my audience/students to LEARN...

How plants near lakes and rivers keep soil in place.

How plants make the water cleaner and safer when the stormwater is being taken care of properly.

As a result of the program, I want my audience/students to ACT by...

Being able to explain the work of the plants when they are close to lakes and rivers.

Being able to explain how the plants help make the water cleaner and safer when the stormwater has good care.

Assessment: (How will you know your audience has reached your intended outcomes)

After the "Stormwater Runoff: activity, students will draw about what they observed in the tray without plants vs. the tray with plants. Then, they will write (or draw - see the scripted lesson plan for details) their conclusions using guiding questions.

Schedule Layout: Items Needed:

15 minutes- Brief presentation about the FFL "Stormwater Runoff" principle.

Slides presentation with pictures and information.

5 minutes- Presentation of the vocabulary (Tier 3) **stormwater**, **pollution** and **soak**.

Slides presentation with pictures and information.

20 minutes- Stormwater Runoff Activity: Show the effects of not having plants near lakes and rivers to absorb most of the pollution, and the effects of having plants near lakes and rivers. *See details in both english and spanish expanded lesson plan documents.*

- 2 paint trays (with textures -bumps in the tray)
- 2 printable stormwater runoff worksheets
- markers or crayons
- tape
- water spray bottle
- pollutant examples: oil, chocolate syrup, frosting, shaving cream, salt, sand, etc.
- artificial plants/leaves

20 minutes- Reflection: Reflect on what the demo showed.

Note: For those students that cannot write a complete sentence, they can draw their answers and write some labels with words.

Worksheet with a "T" chart and questions.
Pencils

Details:

Activity Set-Up:

Preparation of the two trays (only for the teacher's demonstration).

Presentation made ahead:

Slides presentation with information.

Other materials:

Crayons, in case the students want to color their drawings about the stormwater demonstration.