



**Protecting  
Our Watersheds:**  
*Inquiry to Action*

## 3rd Grade: Habitats and Species

### Lesson 1: Water in Nature

#### Lesson Plan

|  |  |
|--|--|
| <b>Lesson Title:</b>                   | Water in Nature  |
| <b>Grade Level:</b>                    | 3  |
| <b>Learning Experience Description</b> | Students identify different patterns of water in nature, and use natural materials to observe how water interacts with nature. This lesson involves getting the students outdoors. |
| <b>Prior Learning Needed:</b>          | None   |
| <b>Time:</b>                           | Part A: 20 minutes ; Part B: 20 minutes  |

#### Standards

**ELA/Literacy:**

W.3.7 Conduct short research projects that build knowledge about a topic.

W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

**Science:**

**3-ESS3-1 (Foundational):** Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.

**2-ESS2-3 (Extended from G2):** Obtain information to identify where water is found on Earth and that it can be solid or liquid.

**Crosscutting Concepts:**

**Patterns:** Similarities and differences in patterns can be used to sort and classify natural phenomena.

**CA Environmental Principles and Concepts:**

**Principle 1: People depend on Natural Systems**

**Concept A.** The goods produced by natural systems are essential to human life and to the functioning of our economies and cultures.

**Success Skills:**

The checked success skills below are present in this lesson:

- ★ Communication
- ★ Collaboration
- ★ Creativity
- ★ Critical Thinking

|   |  |
|---|--|
| <b>Essential Question</b>                     | What is the effect of rain or water on natural materials?  |
| <b>Learning Progression</b>                   | Expand from 2nd grade learning (where is water found on earth?) and use this lesson to set up Lesson 2 - how water moves through a watershed.  |
| <b>Learning Intentions</b><br>"I am learning" | I am learning that water is everywhere, and water interacts with objects/nature in different ways.   |
| <b>Success Criteria</b><br>"I can"            | <i>I can observe what happens when rain (water) falls on objects in nature.</i>  |
| <b>Academic Vocabulary</b>                    | Natural Materials<br>Natural Resource<br>Repel<br>Absorb   |
| <b>Classroom Management Needs</b>             | <ul style="list-style-type: none"> <li>- Awareness of student safety during activities (ie: scissors if using hard copies for each student)</li> <li>- Grouping students for collaboration</li> <li>- Setting boundaries when running investigation outside</li> </ul>                               |
| <b>Materials/<br/>Innovation Lab Use</b>      | <ul style="list-style-type: none"> <li>- Slide Deck</li> <li>- Sort It Out! Activity Sheet / Slides in slide deck</li> <li>- Scissors (don't need if using activity in Slide deck instead of hard copies)</li> <li>- Water dropper</li> </ul> <p>*This lesson does not require iInnovate Lab use</p> |

# Learning Experience Design Plan

## Focused Instruction

Modeling, stated learning intentions

On slide 2, the focus question is stated: "What is the effect of rain on natural materials?"

## Guided instruction

Prompts, Cues, Questioning

### **Part A: Sort It Out! Activity**

This activity was created to activate students' thinking in terms of recognizing and grouping patterns. Students will cut out each square and can sort in a myriad of ways. *You can show the worksheet on screen if students do not have the worksheet printed (A google form may be provided).* Questions framed for this activity sheet include:

- "What patterns do you see?",
- "How would you sort these objects into groups?",
- "How many different ways can you sort them?".

Allow students time to sort, encourage them to be creative and find new and different groupings.

### **Part B: Investigation**

The slide deck will provide instructions on how to test drops of water on different objects in nature. Students will then reflect on observations using the sentence stems "I noticed, I wonder, It reminds me of...".

## Collaborative learning

Student to student structures, 50% instructional time, Accountability

**Part A:** Once students have gone through a few rounds of sorting, have students share with the group or a peer why they sorted their images the way they did. Some additional questions to ask at the end of this activity could be:

- Which pictures have flowing water?
- Where do you think the water is going?
- What animals do you think live in these different places?
- Do you notice different phases of water?
- Where else do you think water might be in these pictures that isn't so obvious?
- Why did you choose to put those specific objects in a group?
- What do all of the objects in your group have in common?

|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>• Can you make any connections between any of the objects and your home/habitat?</li> </ul>  |
| <p><b>Independent Learning</b><br/>Practice, Apply, Transfer</p>                             | <p><b>Part A:</b> Students can regroup the images a second time after gaining new ideas from their peers and try to see different patterns in the images.</p> <p><b>Part B:</b> Students make their own observations when testing water droplets in nature.</p>   |
| <p><b>Check for Understanding</b><br/>Formal, informal structures</p>                        | <p><b>Part A:</b> The following slides will provide examples of how they may have grouped their images, and the patterns they come up with will demonstrate understanding.</p> <p>Part A ends with a review of what was discussed during that session, and part B will review again what was discussed in part A.</p> <p><b>Part B:</b> vocabulary review</p> |
| <p><b>Assessment</b><br/>Rubrics, Products, Projects, Presentations<br/>self-assessments</p> | <p>PBL Works Rubrics:<br/> <a href="#">Collaboration</a><br/> <a href="#">Creativity</a><br/> <a href="#">Critical Thinking</a></p>   |
| <p><b>Closure</b><br/>Exit tickets, feedback for next lesson</p>                             | <p>Students should have an idea of where water is found in their surroundings, and that some items absorb water and some repel. This will help guide their thinking in the next lesson - Water Moving in a Watershed.</p>   |