



Lesson 12

iSpy



Learning Standards & Assessment Tools



Time



Resources



Curricular Integration



Handouts



Science

Big Ideas

- ▶ Water is essential to all living things, and it cycles through the environment.

Content

- ▶ Water sources including local watersheds
- ▶ Water conservation



60-120 minutes



Educator's Kits, including hardcopy lesson plans and support materials, are available for loan through the CRD. For pickup locations, print-friendly materials and multimedia tools see www.crd.bc.ca/teacher or contact the CRD at 250.360.3133.



Student Resources

- ▶ Student Handout: "iSpy"

Lesson resources

- ▶ KWL chart (began in Lesson 1)
- ▶ Book "Frog Girl", by Paul Owen Lewis

Lesson 12: iSpy

Purpose

This lesson involves an outdoor field trip to allow students to observe a local natural water source (e.g., creek, lake, beach), promoting awareness of the importance of water for all living things.

Preparation

1. Select an appropriate location for the field trip. Ideally, it should be a nearby location where students can observe both animal and plant use of water. See appendix D for list of possible field trip locations

Note: be aware of school and district protocol for leaving the school grounds (e.g., permission slips, appropriate supervision). You may wish to enlist the help of parent volunteers or other teachers to facilitate the field trip.

2. Photocopy student handout "iSpy" (one/student)

Procedure

1. Prepare students for the field trip by reminding them of the guidelines for respecting nature. Together read "Frog Girl" by Paul Owen Lewis, then review for example:
 - look, don't touch
 - be careful where you step
 - remember to take away everything you brought (leave no litter)
2. Distribute the student handout, "iSpy". Advise students that they should use this handout to take notes and make sketches of what they see on the field trip.
3. As you visit the chosen location, use prompts to guide students' observations. For example:
 - What can you see? What can you hear? What can you smell?
 - How is this water used by animals?
 - How many different kinds of plants can you see? Can you identify different types of plants? (e.g., trees, flowers, mosses, shrubs)

- Have you ever been anywhere else like this? How was it the same? How was it different?
 - Do you see any signs of water being wasted or polluted? If so, what could be done about it?
 - Do you see any signs of water being protected and used wisely? How?
4. When you return to the classroom, allow time for students to complete their observation sheets.

Assessment Opportunity

Collect students' completed handouts, and use conference questions, such as the following, to assess their learning:

- ▶ How are animals using water?
- ▶ What additional animals might be using this water that we didn't see?
- ▶ How are plants using water?
- ▶ What would happen to the plants and animals if this water disappeared?
- ▶ Did you see pollution in the water? Where did it come from? What could we do to stop water pollution?

Revisit the KWL chart, and ask students to suggest additions and modifications based on what they learned from the field trip.

Curricular Competencies

Look for evidence that students are able to:

Science

- ▶ Questioning and predicting
 - Demonstrate curiosity and a sense of wonder about the world
 - Observe objects and events in familiar context
 - Ask questions about familiar objects and events
- ▶ Planning and conducting
 - Make and record observations
- ▶ Processing and Analyzing
 - Identify simple patterns and connections
- ▶ Evaluating
 - Compare observations with those of others
 - Consider some environmental consequences of their actions
- ▶ Communicating
 - Communicate observations and ideas using oral or written language, drawing, or role-play
 - Express and reflect on personal experiences of place



Extensions and Adaptations

- ▶ If you are unable to conduct a field trip, this lesson can be adapted using a video or book that focuses on a specific water habitat. See appendix D: Additional Resources for some suggested titles.
- ▶ If possible, repeat the field trip to the same location during the winter when the water is frozen. Have students compare what they see with the earlier observations.
- ▶ Initiate an “adopt a stream” challenge for the class or the whole school, where students take responsibility for maintaining the viability of a local stream habitat. Organizations, such as the Pacific Streamkeepers Federation and Adopt-A-Stream, can offer assistance in such challenges (See appendix D for contact information on these organizations).

Curricular Integration

- ▶ Social studies: This lesson can be modified or repeated to encourage observations of the relationships between people and the environment. What human activities can they see? How might these activities affect water quality, animals, the environment?
- ▶ Visual arts: Have students create a drawing, painting, or model of their field trip.
- ▶ Science: Have students look for animals using water at different points in their life cycle (eggs, tadpoles, frogs, insect larvae, birds, fish etc)
- ▶ English language arts: Have students write a postcard to a friend in another town (real or imagined) about what they have seen on their field trip. Alternatively, students can compose a journal entry or poem about the experience.
- ▶ Have students write their own legend like “Frog Girl”.



iSpy

Name: _____ Date: _____

On our field trip, we went to _____
(name of lake, river, ocean)

What was the weather today? Circle one.



What was the weather yesterday? Circle one.



Draw this in the phone Viewfinder.





What did you see on the field trip?

Plants I saw:

Animals I saw and animals I heard:

Draw what this place might look like if the water was gone and write a description.



My favourite thing about this place:

iSpy Viewfinder

