

CULMINATING LESSON A Water Conference

Lesson at a Glance

Students will host a Water Conference for classmates and/or the greater school community. The class will work together in teams of four to six on Water Cycle topics. Each topic corresponds with understandings developed in each of the lessons in this Water Cycle Unit.

Lesson Duration

Four 45-minute periods

Essential Question(s)

How does the water cycle relate to weather and climate?
Does teaching others about the water cycle help in conserving water and preventing pollution?

Key Concepts

- Water is essential to all life on Earth.
- Water exists in three phases: solid ice, liquid water, and gaseous water vapor. Water can freeze, melt, evaporate, and condense.
- A water cycle diagram is a way to show how water is continuously recycled through the processes of evaporation, condensation, precipitation, transpiration, and accumulation.
- Weather and climate in Hawai‘i and around the world relates to the water cycle.
- Each of us uses water every day. Humans have the power to prevent water pollution and to conserve water. There are many simple things we can do every day to be a responsible water user.

Instructional Objectives

- I can explain the processes of the water cycle and how weather and climate relate to it.
- I can create a display and speech that communicates the processes of the water cycle and how people can conserve water and prevent water pollution.

Related HCPSIII Benchmark(s):

Science SC.3.8.2
Describe how the water cycle is related to weather and climate.

Language Arts LA.3.6.2
Give a planned speech to share information with peers.



Assessment Tools

Benchmark Rubric:

Topic		Forces that Shape the Earth	
Benchmark SC.3.8.2		Describe how the water cycle is related to weather and climate	
Sample Performance Assessment (SPA)		The student: Illustrates the water cycle and explains its relationship to weather and climate.	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Describe how the phases of the water cycle relate to weather and climate	Describe how the water cycle is related to weather and climate	Give an example of how the water cycle is related to weather or climate	Recognize that the water cycle is related to weather and climate
Topic		Discussion and Presentation	
Benchmark LA.3.6.2		Give a planned speech to share information with peers	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Give a planned speech to share information with peers, in a highly effective way	Give a planned speech to share information with peers	Give a speech that shows some planning but shares limited information with peers	Give a speech that shows little planning and does not share information with peers

Assessment/Evidence Pieces

Lesson

- *Ideas for Presentations at the Water Conference* student worksheet
- Student presentations

Materials Needed

Teacher	Class	Group	Student
<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Student worksheets from the previous lessons • Poster board • Colored paper • Marking pens • Class calendar 	<ul style="list-style-type: none"> • None

Instructional Resources

Teacher Reading: *Review of the Water Cycle Unit*

Student Worksheet: *Ideas for Presentations at the Water Conference*

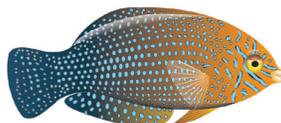
Student Vocabulary Words

Use the Word Wall prepared by the students in the previous lessons to review the concepts covered in the unit.

Lesson Plan

Lesson Preparation

- Review the Teacher Reading *Review of the Water Cycle Unit*.
- Note that the Student Worksheet—*Ideas for Presentations at the Water Conference*—serves both as a way to review the unit and to prompt students to think about presentation possibilities for the Water Conference. Make one copy per student.
- Have selected examples of student work products from each of the lessons ready to show students.
- Decide, ahead of time, how you will divide students into teams.
- Water Conference Options:
 - Students visit other classrooms and present information to various grade levels.
- Plan how to use bulletin board and classroom space to display selected student work products, and how you will organize the room so that the students can do their presentations. You could either have each team present their topics in sequential order, or you could decide to organize concurrent expert team presentations with visitors circulating among the various presentations.
- Schedule the Conference, and plan the visitation by other classes during the Water Conference Event. Decide how and when you and the class will send or extend invitations to the Conference. If possible, enlist the help of other adults to help you in welcoming visitors and managing the conference learning event. Think about how you will greet the visitors and introduce and explain the event.



I. *Announcing a Water Conference*

- A. Explain that students will be using what they have learned to teach others about the Water Cycle. Conduct a review of the water cycle unit with the entire class before assigning students into groups.
- B. Give each student a copy of the *Ideas for Water Conference Presentations Student Worksheet*, and ask students to record ideas for the Water Conference presentations after you review the unit. Refer to the essential questions asked in each lesson. Suggest that they use their own diagrams, weather logs, or portions of the brief demonstrations from lesson activities as a way to teach others what they have learned.
- C. Now divide the students into teams, and assign each team one of the lessons to present to others. Tell the teams that they can add additional drawings or digital images if they would like to do so. Allot teams 20 minutes to produce a brief written plan. Then bring the whole class together for teams to share their plans. Create and post a class schedule that lists the Conference date and what needs to be done before the conference.

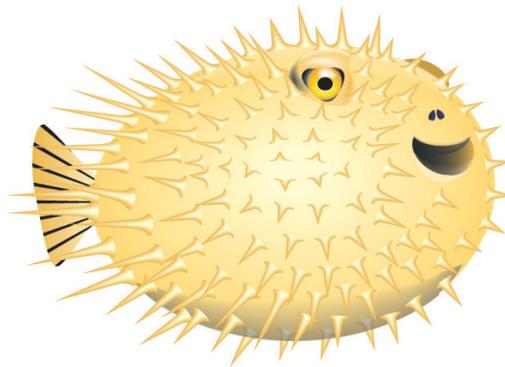
II. *Water Conference Preparation*

- A. Engage student teams in preparing for their presentations. Have each team prepare a poster to introduce their lesson and essential question to the conference audience. Keep the focus on what is important for others to learn. Give students' presentation a title, which could be the same as the name of their assigned lesson. Write a brief version of the essential question asked in their lesson.
- B. Help students to select appropriate student work products, and/or to put together materials needed to demonstrate activities in the lesson.
- C. Depending on how you have decided to organize the conference event, explain to teams how and whether they will be doing their presentations.
- D. Consider possibilities for modifying the Ideas for Presentations at the Water Conference into a conference brochure or handout(s) for visitors to use and record what they learn from the conference.
- E. Engage students in preparing and/or illustrating the invitation(s) to the Conference, and a conference brochure or conference handout(s).



III. *The Water Conference Event*

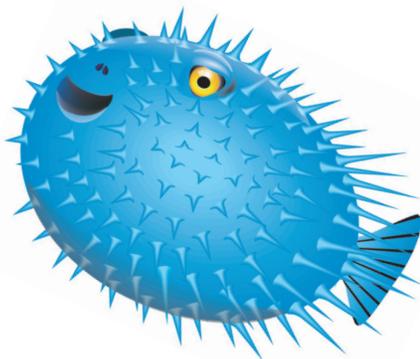
- A. The day before the conference, briefly review your expectations and “rehearse” the event. Use this as an opportunity to coach the students as needed, not only on the science content, but also on making their presentations to others.
- B. The day of the conference, before visitors arrive, ask each team to check to make sure that everything is ready. Encourage and reassure students.
- C. Greet visitors when they arrive, explain the purpose of the conference, what the visitors are expected to do, and how, as well as when the conference will end. Here, you might want class leaders to make these announcements.
- D. Debrief students after the Water Conference.
- E. Immediately, or as soon after the conference as possible, ask students what they learned as a result of presenting what they know about the water cycle to others.
- F. Discuss what they think the visitors learned, and why what they taught the visitors is important. For example, does teaching others about the water cycle help in conserving water and preventing pollution?



CULMINATING LESSON Teacher Reading

Review of the Water Cycle Unit

Lesson	Essential Question(s)	Student Work Products
Lesson 1: Water in My Life	Why is water important to my life? How much water do I use in my everyday activities?	<ul style="list-style-type: none"> • <i>How much water do I use? Water Use Log</i> student worksheet • Students T chart on Water Users • Student writing about water usage and how it might change in a drought • Student water usage bar graph
Lesson 2: Cycle of Water	How old is water? What is the water cycle? How do the processes in the water cycle relate to weather and climate?	<ul style="list-style-type: none"> • Water Cycle Diagram student worksheet • Water Cycle Report
Lesson 3: Close Relations: Weather, Climate and Water	What are weather and climate, and how do they relate to the water cycle?	<ul style="list-style-type: none"> • <i>Rain Gauge Instructions and Log</i> student worksheet • <i>Imaginary Location</i> student writing
Lesson 4: We Are Responsible Water Users!	How can we conserve water resources and protect them from pollution?	<ul style="list-style-type: none"> • Index cards with pollution and conservation suggestions • Index card with tooth brush experiment hypothesis and estimates • <i>My Family's Water Conversation and Pollution Prevention Score Card</i> • Letters to the family about water conservation



CULMINATING LESSON

Ideas for Presentations at the Water Conference

Page 1 of 2

Lesson	Essential Questions	Ideas
Lesson 1: Water in My Life	Why is water important to my life? How much water do I use in my everyday activities?	
Lesson 2: Cycle of Water	How old is water? What is the water cycle? How do the processes in the water cycle relate to weather and climate?	



CULMINATING LESSON

Ideas for Presentations at the Water Conference

Page 2 of 2

Lesson	Essential Questions	Ideas
Lesson 3: Close Relations: Weather, Climate, and Water	What are weather and climate, and how do they relate to the water cycle?	
Lesson 4: We Are Responsible Water Users!	How can we conserve water resources and protect them from pollution?	

