# Arizona Water Story Common Core Standards Correlation September 2013

# Lesson 1: What We Know About Water

# **Standards**

**English Language Arts (ELA) Common Core Standards:** Students will determine the meaning of general academic and domain-specific words or phrases (accumulation, evaporation, precipitation, runoff, erosion, surface water, groundwater, etc.) in a text relevant to a grade 4 topic or subject area. (4.RI.4)

Describe the overall structure (e.g., chronology, comparison, cause/effect, and problem/solution) of events, ideas, concepts, or information in a text or part of a text *to explain the process of the water cycle* and the sources of water in our environment. **(4.RI.5)** 

# Exploration and Explanation – Water Cycle Model

# Literacy Link

# English Language Arts (ELA) Common Core Standards:

Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.

b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.

- c. Use a variety of transitional words and phrases to manage the sequence of events.
- d. Use concrete words and phrases and sensory details to convey experiences and events precisely.

e. Provide a conclusion that follows from the narrated experiences or events. (4.W.3)

# **Evaluation**

# English Language Arts (ELA) Common Core Standards:

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts,* building on others' ideas and expressing their own clearly.

- a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
- b. Follow agreed-upon rules for discussions and carry out assigned roles.
- c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
- d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. **(4.SL.1)**

# Lesson 2: Arizona's Geography

## **Standards**

### English Language Arts (ELA) Common Core Standards:

Students will demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.

d. Order adjectives within sentences according to conventional patterns (e.g., including comparatives and superlatives such as dry/drier/driest to describe the three regions of Arizona). **(4.L.1)** 

## Activity 2.2: Regions of Arizona

Literacy Link

### English Language Arts (ELA) Common Core Standards:

Produce clear and coherent functional writing (e.g., friendly and formal letters, recipes, experiments, notes/messages, labels, graphs/tables, procedures, invitations, envelopes) in which the development and organization are appropriate to task and purpose. (AZ.4.W.4)

### **Student Evaluation**

#### English Language Arts (ELA) Common Core Standards:

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

- c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*).
- d. Use precise language and domain-specific vocabulary to inform about or explain the topic. (4.W.2)

# Lesson 3: Arizona's Watersheds

### **Standards**

#### English Language Arts (ELA) Common Core Standards:

To demonstrate understanding about surface water and groundwater concepts, students will:

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic (surface water, runoff, watershed/basin, groundwater, aquifer, overdraft, well). (4.W.2)

### **Evaluation**

Literacy Link

Bring expository writing into this lesson by having students write an expository paragraph about the soil experiment they conducted. Students should write a topic sentence about what they did, supporting sentences about their findings and a concluding sentence about how what they observed relates to the real world.

## English Language Arts (ELA) Common Core Standards:

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

- a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
- b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
- c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*).
- d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
- e. Provide a concluding statement or section related to the information or explanation presented.
   (4.W.2)

# Lesson 4: Arizona Water Story Video

### **Standards**

### English Language Arts (ELA) Common Core Standards:

To demonstrate how water plays a part in the history of Arizona, students will:

Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. **(4.SL.2)** 

Identify the reasons and evidence a speaker provides to support particular points. (4.SL.3)

# Lesson 5: We All Need Water, But Supply Is Limited

#### **Standards**

#### English Language Arts (ELA) Common Core Standards:

To defend their positions in discussions of water rights, students will:

Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate

facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace. **(4.SL.4)** 

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (4.RI.1)

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts,* building on others' ideas and expressing their own clearly.

- e. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
- f. Follow agreed-upon rules for discussions and carry out assigned roles.
- g. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
- h. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. (4.SL.1)

# Lesson 6: My Water Usage – How Can We Use Water Wisely?

# **Standards**

## English Language Arts (ELA) Common Core Standards:

To write a paragraph about their home water usage using complex sentences, including one habitual past sentence (e.g., "We used to run the faucet while we brushed our teeth,") and one simple present sentence (e.g., "but now we turn off the faucet.") to describe their home water use in the past and present, students will:

- a. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- b. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
- c. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
- d. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*).
- e. Use precise language and domain-specific vocabulary to inform about or explain the topic.
- f. Provide a concluding statement or section related to the information or explanation presented.
   (4.W.2)

# Activity 6.1: Personal Water Conservation

### Literacy Link

Using old magazines, allow students to find and cut out pictures of activities or devices that use water. Have students glue the pictures into a collage and write a sentence under each one explaining how the activity or device uses water.

### English Language Arts (ELA) Common Core Standards:

Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. (4.SL.5)

## Activity 6.2: Water Savings All Around Us

## Literacy Link

Have students come up with a water conservation campaign for their school to persuade their peers to save water. Students can make posters, school announcements, bookmarks, brochures and whatever else they can dream up.

# English Language Arts (ELA) Common Core Standards:

Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. (4.SL.5)

## Literacy Link

Students can write a persuasive letter to the city council about water conservation recommendations for changes that should be made in order to ensure a water supply for the future population of Arizona.

## English Language Arts (ELA) Common Core Standards:

Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

- a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.
- b. Provide reasons that are supported by facts and details.
- c. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).
- d. Provide a concluding statement or section related to the opinion presented. (4.W.1)

### **Student Evaluation**

### Language Objective Assessment

Students will write a paragraph about their home water usage using complex sentences, including one habitual past sentence (e.g., "We used to run the faucet while we brushed our teeth,") and one simple present sentence (e.g., "but now we turn off the faucet.") to describe their home water use in the past and present.

# English Language Arts (ELA) Common Core Standards:

a. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

b. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.

c. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

d. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).

e. Use precise language and domain-specific vocabulary to inform about or explain the topic.

f. Provide a concluding statement or section related to the information or explanation presented. (4.W.2)

## Math Connection

Have students make a graph showing their predictions about the future water supply in Arizona using precipitation data from the past. Then have students make a graph showing their predictions about the future population of Arizona. For data tables you can use, go to <u>www.srpnet.com/education</u> and click on "Arizona Water Story."

# Mathematics Common Core Standards:

4.MD.4. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.