Pinellas County Watershed Atlas Learning Kit What Lives in a Wetland? Teacher's Guide

Students practice for the FCAT while learning about Florida wetlands

GRADE LEVEL: Intermediate grades

SUBJECT AREA/COURSE: Reading, Writing (Language Arts) and Math

SUNSHINE STATE STANDARDS:

LANGUAGE ARTS:

• The student reads text and determines the main idea or essential message, identifies relevant supporting details and facts, and arranges events in chronological order. (LA.A.2.2.1)

• The student reads and organizes information for a variety of purposes, including making a report, conducting interviews, taking a test, and performing an authentic task. (LA.B.2.2.5)

• The student recognizes the difference between fact and opinion presented in a text. (LA.B.2.2.6) **MATH (Big Ideas):**

• Develop quick recall of addition facts and related subtraction facts and fluency with multi-digit addition and subtraction.

• Develop quick recall of multiplication facts and related division facts and fluency with whole number multiplication.

• Develop an understanding of and fluency with addition and subtraction of fractions and decimals.

ACADEMIC OUTCOMES/LESSON OBJECTIVES:

• Students will read a selection adapted from the Education Watershed Atlas, written in FCAT practice form.

• Students will respond to FCAT-type questions or prompts in Reading, Writing, and Math.

DURATION: One instructional period

TEACHER BACKGROUND INFORMATION: Florida wetlands are varied and range from marshes that have water year-round to riverside swamps that flood almost yearly. Some low places that occasionally have standing water are important nursery grounds for amphibians because they lack predator fish that would eat eggs and young. Here, animals and plants must survive both dry and wet times. Some amphibians wait out the dry time buried in the mud.

The kind of soil and the plants that are present are both used to define a wetland. The soil may be wet yearround, as in a marsh, or wet only during the rainy season. Animals and plants living in wetlands must find solutions to living in these conditions. These living creatures have adaptations for residing in wetlands. Read the students' reading selection below for some examples of these adaptations.

Visit http://www.Pinellas.wateratlas.org > Digital Library > Search Florida Wetlands in All Atlases > and scroll down to Florida Wetlands, University of Florida - Wetlands Extension (<u>http://wetlandextension.ifas.ufl.edu/</u>). The website opens in a new dialog box. You will need to change pages to scroll to this site. Explore, and then lead your students on a guided tour of this site for a deeper understanding of wetlands.

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TEACHER WEBSITE RESOURCES:

- Sunshine State Standards can be found at http://firn.edu/doe/menu/sss.htm
- Information about FCAT can be found at http://www.firn.edu/doe/sas/fcat/pdf/fcatfact.pdf
- Rubric for grading FCAT writing prompts http://www.firn.edu/doe/sas/fw/fwaprubr.htm
- Rubric for grading FCAT reading questions http://www.firn.edu/doe/sas/fcat/pdf/rubrcrdn.pdf
- Rubric for grading FCAT math questions http://www.firn.edu/doe/sas/fcat/pdf/rubrcmat.pdf
- More FCAT-Friendly Activities, visit <u>http://pelotes.jea.com</u>

MATERIALS NEEDED: Internet access with www.pinellas.wateratlas.org bookmarked, student pages for "What Lives in a Wetland?"

SAFETY: N/A

VOCABULARY: wetland, swamp, estuary, exotic, oxygen, mode, muck, buttress, adaptation

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KEY:

Reading

1. Use the rubric for Short Response Reading Questions – 2 points LA.A.2.2.1, Bloom's Taxonomy Level One

Example of a Top-Score Response:

Some wetland plants, like cypress trees, can grow roots that reach above the surface of the water. These "knees" help the trees breathe even when most of their roots are underwater. Other plants grow floating leaves so they can reach sunlight even though the rest of the plant is underwater.

2. c. LA.A.2.2.1, Bloom's Taxonomy Level One

3. b. LA.A.2.2.1, Bloom's Taxonomy Level One

4. Use the rubric for Extended Response Reading Questions – 4 points LA.A.2.2.5, Bloom's Taxonomy Level Two

Example of a Top-Score Response

This opinion is false in three different ways. First, it says that all wetlands are the same, and the article says that there are many different kinds. Then the opinion says that all wetlands are soaking wet. But the article says that some wetlands are only wet during the rainy season.

They're probably dry during the rest of the year. Last, the opinion says that wetlands are filled with nothing but bugs. The article says that frogs, bears, panthers, manatees, and birds live in wetlands. That's a lot more than just bugs.

Writing

For All – Use the rubric for Florida Writes! – 6 points

- 1. LA.B.2.2.6
- 2. LA.B.2.2.6
- 3. LA.B.2.2.5
- 4. LA.B.2.2.5

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Math

 c. MA.E.1.2.2
c. MAA.3.2.2, MA.3.2.3
Use the rubric for Extended Response Math Questions – 4 points MA.A.3.2.2, MA.3.2.3

Example of a Top-Score Response:

32 feetx1 year=2.67 feetrounded to the nearest tenth = 2.7 feet/monthyear12 monthsmonth

4. c. MAA.3.2.2, MA.3.2.3

RESOURCES:

- Sunshine State Standards can be found at http://firn.edu/doe/menu/sss.htm
- Information about FCAT can be found at http://www.firn.edu/doe/sas/fcat/pdf/fcatfact.pdf
- Rubric for grading FCAT writing prompts http://www.firn.edu/doe/sas/fw/fwaprubr.htm
- Rubric for grading FCAT reading questions http://www.firn.edu/doe/sas/fcat/pdf/rubrcrdn.pdf

Date:

• Rubric for grading FCAT math questions http://www.firn.edu/doe/sas/fcat/pdf/rubrcmat.pdf