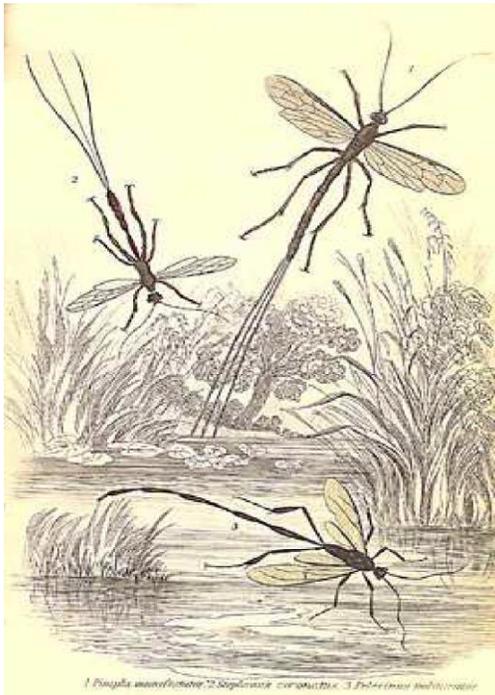




Muck, Snails, and Rails (Dry Version)

2018 - Driftwood Education Center



Puddle Stompin' in the Muddy Marsh

Class Description:

Marshes tend to be associated with one thing: MUD! These amazing places, however, are more than just mud. They are thriving ecosystems with thousands of species that inhabit them. Students will examine the marshlands here at Driftwood. We will explore the animal and plant species and discover why these locations are so important to pollution control.

For this class, students will be taught for the entire class period and will be walking to the mud pit to touch and feel the mud.

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Muck, Snails, and Rails

I. Pre-class set-up

1. Plan with any other instructors
2. Have visuals and activity items

II. Introduction, overview, and assessment (30 min)

1. What is a marsh?
2. Overview and description of class
3. Ocean vs. Marsh relay game
4. River activity

Concept 1, 2, and 3 – Outcome 1

III. On the Hike to the Marsh (30 min)

1. Plants: Introduction to marsh succession and Ro- Sham-Bo game
2. Marsh scenic viewing areas
3. Food web and organism activities

Concepts 1, 2, and 3 - Outcome 1 and 2

IV. Mud Pit! (15 min)

1. Exploration and a little mud play

V. Conclusion and Wrap-up (15 min)

1. Marsh metaphors game to review marsh importance

VI. Clean up (time for students is as needed)

1. Make sure everything is put away
2. Clean yourself up

VII. Additional Activities and Information

1. Migratory Bird Hopscotch
2. Oyster Bed Tag

Georgia Performance Standards Met:

4th Grade:

S4L1.: Students will describe the roles of organisms and the flow of energy within an ecosystem.

6th Grade:

S6E3.: Students will recognize the significant role of organisms and the flow of energy within an ecosystem.

7th Grade:

S7L4.a: Demonstrate in a food web that matter is transferred from one organism to another and can recycle between organisms and their environments.

Concepts:

Focal points of this class are:

1. A marsh is a thriving ecosystem with abundant life.
2. A marsh habitat is made of specific forest and vegetation areas that are created through succession.
3. Marshes provide a buffer for natural disasters, help increase pollution control, and are an important habitat for plants and animals.

Outcomes:

Upon completion of this class, students will be able to:

1. Explain the importance of a marsh or wetland ecosystem.
2. Describe and explain succession and how habitats develop over time.

South Carolina Standards met:

5th Grade:

5.E.3A.1: Construct explanations of how different landforms and surface features result from the location and movement of water on Earth's surface through watersheds (drainage basins) and rivers.

5.E.3B.3: Construct scientific arguments to support claims that human activities (such as conservation efforts or pollution) affect the land and oceans of Earth.

5.L.4B.2: Develop and use models of food chains and food webs to describe the flow of energy in an ecosystem.

7th Grade:

7.EC.5B.2 Develop and use models (food webs and energy pyramids) to exemplify how the transfer of energy in an ecosystem supports the concept that energy is conserved.

Next Generation Science Standards met:

5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

MS-LS2-1: Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

MS-LS2-3: Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

MS-LS2-4: Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

Florida Performance Standards Met:

4th Grade:

4.L.17.4: Recognize ways plants and animals, including humans, can impact the environment.

5th Grade:

5.L.17.1: Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.

7th Grade:

7.L.17.1: Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web.