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Field Journal: www.wildlifehc.org/managementtools/backyard-amphibians.cfm

Directions for a Triorama: http://www.maasd.ecsd.net/triorama_directions.htm

Grade **3** Subject **Science (EIC)**

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Written by: **Grade 3 Team, J. R. Briggs, Ashburnham, MA**

Unit Title **Vernal Pool Ecology**

Stage 1- Identify Desired Results

Enduring Understandings/ Big Ideas

Students will understand that...

All living things change throughout their lifetime.

Essential Questions

What life cycles take place in the vernal pool?

Why are vernal pools important?

Knowledge and Skills/District Learning Standards

1. Reading a field guide

2. Using appropriate behavior for field work

3. Collecting information through observation

4. Mapping

Stage 2- Assessment Evidence and Facet Focus

Explanation

Interpretation

Application

Perspective

Empathy

Self-Knowledge

Performance Task

Students create a triorama of the life cycle of a frog.

Goal

Students are able to draw and describe the life cycle.

Role

A Vernal Pool Ecologist

Audience

peers

Situation

You are conducting scientific research about the organisms found in our vernal pool.

<p>Product</p> <p>A triorama of the life cycle of the frog</p>
<p>Standards</p> <p>Science 4. Describe the life cycle of a frog.</p> <p>ELA 13.9 Locate facts</p> <p>14.2 Identify sensory images in poems.</p> <p>Math 4.D.1 Collect and organize data</p>
<p>Other Evidence</p> <p>*Field Journal</p> <p>* Pre & Post-test</p> <p>*poem</p> <p>*graph</p>
<p>Please Attach a rubric with understanding and performance criteria.</p>
<p>Stage 3- Learning Plan- Briefly describe.</p>
<p>W- Students know where they are going, why, and what is required of them.</p> <p>Post the Enduring Understanding and the Essential Question.</p>
<p>H- Students are hooked.</p> <p>Show a container of pool water containing small organisms. Students observe and sketch what they see under a microscope.</p>
<p>E- Students have opportunities to explore and experience and receive instruction to equip them.</p> <p>Students are introduced to vocabulary: vernal, amphibian, larva, obligate, facultative</p>
<p>R- Students have opportunities to rethink, rehearse, revise and refine their work based upon timely feedback.</p>
<p>E- Students have an opportunity to evaluate their work and set future goals.</p> <p>Students use the rubric and checklist to evaluate their project.</p>
<p>T- The learning plan is tailored and flexible to address the interests, learning styles, and skills of the students Flexible grouping</p>
<p>O- The learning plan is organized and sequenced to maximize engagement and effectiveness.</p> <p>1.Pre-test - Draw and describe the life cycle of the frog.</p> <p>2.Observe pool water using microscopes.</p> <p>3.Begin reading about amphibians in the Field Journal.</p> <p>5. Play the Frog Life Cycle Game.</p>

6. Construct trioramas of the frog's life cycle.
7. Map the field study area in the journal.
8. Collect, observe and sketch vernal pool organisms.
9. Share observations. Tally organisms found and graph.
10. Complete "I Wonder..."
11. Post-test

The Life Cycle of the Frog Diorama Project Rubric

Student name: _____

	Understanding	Performance
4	I showed that I had a thorough understanding of the life cycle of the frog.	My project was exceptionally neat and well organized.
3	I showed that I understood the life cycle of the frog.	My project was neat and well organized.
2	I showed some understanding of the life cycle of the frog.	My project was clearly organized but could improve on neatness.
1	I needed to show understanding of the life cycle of the frog.	My project needed organization and neatness.

Total points _____

Comments: