

Arts Integration: A Mastodon is not a Dinosaur!

Lesson Plan

Lesson Name: Fossils

This lesson will take place over the course of many days, as the students' research what a fossil is, how a fossil is formed, and the job of a paleontologist.

Goal: To create an understanding of fossil characteristics.

Objective:

The students will be able to do the following:

- Students will learn the difference between a fossil and a bone.
- As a class, students will research how a fossil is formed.
- As a class, students will explore different fossils (including mastodon, mammoth and dinosaur fossils/casts), looking at shapes, sizes, weights, similarities, differences, etc.
- As a class, students will discover what a paleontologist does.
- As a class, students will dig through Mastodon Matrix (10,000 year old dirt from the Hyde Park dig in New York state).
- As a class, students will create a fossil fact sheet for our classroom informative text.
- Students will write and illustrate fossil pages for informative texts.

Grade Level: Kindergarten

Arts Standards addressed:

- ART.I.VA.EL.1
- ART.I.VA.EL.2
- ART.I.VA.EL.3
- ART.I.VA.EL.4
- ART.II.VA.EL.3
- ART.II.VA.EL.4

Other Subject Areas Standards addressed:

Kindergarten Science GLCES

- Identify that living things have basic needs (food, habitat, etc.).
- Identify and compare living and nonliving things

Kindergarten ELA GLCES

- R.IT.00.01
- R.IT.00.03
- R.IT.00.04
- R.CM.00.03

- R.CM.00.04
- W.GN.00.04
- W.PR.00.01
- W.PR.00.02
- W.PR.00.03

Kindergarten Common Core State Standards

Reading Standards

Craft and Structure

- Identify the front cover, back cover, and title page of a book.
- With prompting and support, name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

Integration of Knowledge and Ideas

- With prompting and support, describe the relationship between illustrations and the text in which they appear

Range of Reading and Level of Text Complexity

- Actively engage in group reading activities with purpose and understanding.

Writing Standards

Text Types and Purpose

- Use a combination of drawing, dictating, and writing to compose informative/explanatory text in which they name what they are writing about and supply some information about the topic.

Research to Build and Present Knowledge

- Participate in shared research and writing projects.
- With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Instructional Outline:

Introduction:

The students will be introduced to fossils by viewing pictures and actual animal/mastodon fossils.

Classroom Management Strategy:

Students will be actively involved in this lesson through brainstorming, listening, handling fossils, weighing and measuring, writing and illustrating.

Main Activity:

1. Using informative texts and the internet the teacher will guide the students, in large and small groups, through learning specific characteristics of fossils (how a fossil is formed, what a fossil is, etc.)
2. The students will discover: how fossils are formed, how fossils are recovered from the ground and assembled, how fossils are identified.
3. The students will complete 3 lab activities directly relating to fossils. Using Mastodon Matrix (10,000 year old peat from a mastodon dig in New York) and lab lessons from Paleontological Research Institute students will be able to uncover items, weigh, and measure and identify/label them.
4. Using the research gathered students will write and illustrate pages for informative texts about mastodons.

Additional Information

Materials Needed:

Informative texts or age-appropriate internet sites containing facts about fossils

Markers

Large paper for student page of classroom book.

Mastodon Matrix

Toothpicks, screens, glass jars, water

Crayola Model Magic

Paint

Fossil examples

Outcomes/Assessment:

The students' knowledge gained through research about fossils will be assessed through a fact page created as a class, and through the writing/illustrating informative text.

Potential Challenges:

Finding information that is age-appropriate for Kindergarten students.

Explaining information at an age-appropriate level.

