Pre- and Post-Visit Activities: Dinosaurs and Prehistoric Pals

Overview:

These activities, which support the Staten Island Museum’s lesson “Dinosaurs and Prehistoric Pals,” introduces students to paleontology and background information about dinosaurs.

Three components:

1. **Background**: Information about dinosaurs to prepare yourself and your students for your trip to the Staten Island Museum.
2. **Pre-Visit Activity**: Before your visit, share background information with students and review what a Paleologist does. Create a chart of questions students have about paleontology and read the article “Ask the Dinosaur Expert.”
3. **Post-Visit Activity**: Create a story or drawing to go along with the “Museumosaurus” that each student created at the Museum.

Materials:

1. Background information for teachers.
3. Tools of the trade for paleontologists: hammer, pick, brush, tape measure, etc.
4. “Museumosaurus” handouts.

Background Information:

Due to new discoveries and scientific improvements, we are constantly learning more and more about dinosaurs, sometimes making it difficult for educators to stay up-to-date! Here are some current facts about dinosaurs:

- The word dinosaur means “terrible lizard” although they were not really lizards, but had similar features of these reptile cousins.
- Scientists have given dinosaurs scientific names; they are named for the places where they were found and even named for unusual features of their bodies.
- Dinosaurs lived during the Mesozoic Era from 230 to 65 million years ago.
- Dinosaurs were vertebrates (animals that have backbones.)
- Dinosaurs were terrestrial, meaning they lived on land. While some dinosaurs may have been able to paddle through water, they did not live in oceans, rivers or lakes like the swimming reptiles of the Mesozoic Era such as the mosasours and plesiosaurs.
- The previously named Brontosaurus is now known to be the same species as the Apatosaurus, therefore leaving the separate distinction of Brontosaurus as inaccurate.
- The most known mass extinction came at the end of the Cretaceous Period, approximately 65 million years ago. This mass extinction wiped out an estimated 70%-80% of all species.
Vocabulary:

- **Dinosaur**: a fossil reptile of the Mesozoic Era, often reaching an enormous size.
- **Fossil**: the remains or impression of a prehistoric organism preserved in petrified form or as a mold or cast in rock.
- **Carnivore**: an animal that feeds on meat.
- **Herbivore**: an animal that feeds on plants.
- **Omnivore**: an animal that eats both plants and meat.
- **Triassic**: of, relating to, or denoting the earliest period of the Mesozoic Era, between the Permian and Jurassic periods; 230 to 190 million years ago. Characterized by the advent of dinosaurs.
- **Jurassic**: of, relating to, or denoting the second period of the Mesozoic Era, between the Triassic and Cretaceous periods; 208 to 146 million years ago. Dinosaurs were dominant on both land and sea.
- **Cretaceous**: of, relating to, or denoting the last period of the Mesozoic Era, between the Jurassic and the Tertiary periods; 140 to 65 million years ago. Characterized by the greatest development and subsequent extinction of dinosaurs and the advent of flowering plants and modern insects.
- **Paleontologist**: a scientist who studies fossils and the geologic past.
- **Extinct**: of a species, family or other larger group having no living members.

Before Your Visit:

Bring in or project images of a variety of tools (hammer, pick, brush, tape measure, etc.) used by a paleontologist in the field and discuss the purpose and use of the tools. *Interdisciplinary approach* - practice using the tape measure to measure items in the classroom and discuss the importance of exact measurement.

Encourage students to write down questions they have for a paleontologist. When the students have finished writing their questions, create a class chart about the dinosaur questions. When all questions have been recorded, read the article “Ask the Dinosaur Expert.” See if any of the student’s questions have been answered. Remaining questions can be answered on your trip to the Staten Island Museum!

Example questions:

- What evidence do we have about dinosaurs?
- What is the difference between a fossil and a trace fossil?
- Why is the study of paleontology important?
- What can paleontology tell us?

After Your Visit:

Students will create a story or drawing for the “Museumosaurus” they created during their trip to the Staten Island Museum (below).
What habitat does your “Museumsaurus” live in? Describe and draw what it might look like below.
Describe your "Museumosaurus." What does s/he do? What does s/he eat? What does s/he look like?
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Create a story for your "Museumosaurus" here. Don’t forget to have a beginning, middle, and an end.