



Preschool Educator Guide: Dino Hunt

National Standards (K)

4.1 Science as Inquiry

- Understanding scientific inquiry
- Abilities necessary to do science inquiry

4.3 Life Sciences

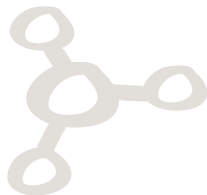
- Characteristics of organisms
- Life cycles of organisms
- Organisms and environments



The Learning Continuum: Before, During and After Your Visit

Guide Theme

In preparation for a visit to the New York Hall of Science, each child will imagine that he or she is a scientist. As a group of scientists, your students will use the inquiry method to practice observation skills and make discoveries through exploration and play. Placing a NYSCI visit at the center of an inquiry provides the students with continuity and purpose, and provides teachers with a way of assessing student understanding.



Begin Exploration at School

Before coming to NYSCI, students can practice being scientists at school by trying the continuum activities and reading books from the list provided. These continuum activities vary in time, depth and work to prepare early learners to get the most out of their trip.

Exploration at NYSCI

The students will experience a dinosaur-themed activity at NYSCI. The workshop focuses on the body parts, habitat, life cycle and behavior of dinosaurs. After the guided activity, students will have time to use their skills and explore the exhibits in the Preschool Studio.

Preschool Studio Exhibits List

- Loft
- Ball Drop Wall
- Discovery Boxes
- Puppet Theater
- Brickworks
- Train Table
- Soft Arch



Finish Exploration at School

Students can continue their experience at school with one or more of the continuum activities.





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Continuum Activities

What is that?

What happens if you can only see part of an animal or dinosaur. What if you only found bits and pieces of its fossils? How would you know what the whole thing looked like? Scientists make inferences or guesses. Now we'll do the same thing!

Time: 10 minutes

Materials

- Person
- Blanket (optional)
- Drawings of parts of a dinosaur

Instructions

1. Ask a student or visitor to hide behind a door or a blanket with only one arm showing.
2. Have students guess the characteristics of that person using only what they see.
3. Hand out pictures of parts of dinosaurs for students to guess what they might look like.
4. After they make predictions, have the students draw what they think the rest of the dinosaur's body would look like.

Dino Teeth

Ask students to name food that they might eat. Hold up the pictures of animals. What food might these animals eat? Animals with long sharp teeth look like they eat meat and they are called carnivores. The flat blunt teeth are for vegetables. Animals that eat only plants are called herbivores.

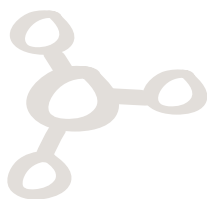
Time: 10 minutes

Materials

- Pictures of plant-eating and meat-eating animals. Staple remover (optional)
- Small rocks
- Cotton balls
- Leaves
- Mirror

Instructions

1. Each team of two students receives a staple remover, cotton balls, two rocks and several leaves. Demonstrate how the staple remover works. (If staple removers are too sharp, use fingers in a pinching motion.) Which teeth do these remind you of?
2. Hold up two rocks and tell the students that they represent the flat, blunt teeth of herbivores. Rub the two together to demonstrate how herbivores chew.
3. The cotton represents the meat and the leaves represent the vegetables. Have students experiment "eating" using both the staple remover or their fingers and the rocks.
4. Which type of teeth work best for each type of food?
5. After discussing the results, distribute a mirror to each student and have them examine their own teeth. What type of teeth do they have? Both? They are omnivores! Animals that eat both meat and plants are called omnivores.





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Dino-Dig

Students will be paleontologists today. Paleontologists dig up dinosaur fossils. Do you think they find these dinosaurs all in one piece? They usually find many pieces after a dig and have to put them together. This is exactly what we will be doing today.

Time: 15 minutes

Materials

- Plastic dinosaurs or pieces of a dinosaur puzzle (cut a picture of a dinosaur into several pieces)
- Large aluminum tray
- Sand
- Small paintbrushes or tooth brushes

Instructions

1. Distribute a tray with puzzle pieces of dinosaur pictures in the sand to each team of two students.
2. Distribute brushes so that the students can brush away the sand to reveal one puzzle piece at a time.
3. As they find each puzzle piece, have them place it on a sheet of paper. They should keep digging until they think they've found all the pieces.
4. After the dig, have students try and put these puzzle pieces together.

Follow-Up

As an extension, you can put two different sets of puzzles in each tray. This will show that many dinosaurs could have been buried in the same area.

As an alternative, bury dried, sterilized chicken bones in the sand trays instead of puzzle pieces. Use five or six bones per student. Have your students arrange the bones they have discovered on a cardboard base to create the shape of the imaginary dinosaur fossil. Glue the bones in place and label the fossil with the name of the paleontologist who discovered it!

Dino Dramatics

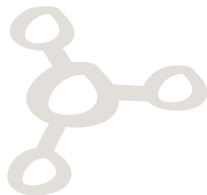
Look at all of these pictures. How are these animals standing? Where are their legs? Where are your legs? The triceratops is like a dog with its legs right under it. How about an alligator?

Materials

- Pictures of T-Rex, triceratops, an alligator

Instructions

1. Have students act out each animal in the body teams. For example as the triceratops, arms and legs should be right under. With the alligator, students should try and have their arms and legs further away from their body.
2. Discuss the relationship between different body types and different behaviors. Why do you think the alligator's legs are at the side of its body.





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Curriculum Connections

Guide Theme

- Classifying:* Arranging or distributing objects, events, or information according to some method or skill.
- Creating Models:* Displaying information, using multi-sensory representations.
- Generalizing:* Drawing general conclusion from particulars.
- Observing:* Becoming aware of an object or event by using any of the senses (or extensions of the senses) to identify properties.
- Predicting:* Making a forecast of future events or conditions expected to exist.
- Animal Diversity:* How do variations in form and function help animals meet their needs?

Book List

- My Visit to the Dinosaurs* – Alike
- Bones, Bones, Dinosaur Bones* – Bryon Barton
- I Met a Dinosaur* – Jan Wahl and Chris Sheban
- Harry and Dinosaurs say “Raahh!”* – Ian Whybrow

Vocabulary List

- Herbivore
- Carnivore
- Omnivore
- Fossil
- Paleontology

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