WELCOME TO THE FIELD MUSEUM

July 2015

Golden Apple Inquiry Science Institute

Agenda

- Introduction to The Field Museum
- Object-based Learning
- Working with Museum Collections

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A Brief History

West Court Field Columbian Museum with Zoology exhibit cases (January, 1897) FMNH CSZ8466

Our Collections

N. W. Harris Learning Collection

- A lending library of artifacts and specimens
- Established in 1911
- 400+ Exhibit Cases
- 60 Experience Boxes

N. W. HARRIS
LEARNING
COLLECTION
AT THE FIELD MUSEUM

What is Object-based Learning?

The consequent learning and meaning-making that develops from interacting with an object -

Based on the Contextual Model of Learning (Falk & Dierking, 2000)

Objects: Identifying vs. Reading

Identifying Objects

- Early language development emphasizes the importance of naming and identifying objects.
- Once an object has been identified, it is time to teach the child to name something else.

Reading Objects

- Just like reading text, reading an object is a skill set that needs careful scaffolding.
- Reading an object requires careful examination and access to prior knowledge.

Benefits of "Reading" Objects

"At the centre of all our programs… is a belief in the tremendous power of objects to educate. In fact, we think it is as important for people to learn to use objects as a means of discovering things about themselves and their world as it is for them to learn to use words and numbers." – *Nova Scotia Museum*

What objects offer that other mediums do not:

- Language differentiation
- Knowledge level differentiation
- Learning style differentiation

Top 5 Reasons OBL Works

- Takes advantage of students' natural curiosity.
- Makes all learning hands-on.
- Participatory in nature.
- Promotes the cycle of inquiry.
- Develops critical thinking and problem-solving.

Learning from Objects

Practice Reading a common object

What do you notice about the object?

What does the object…

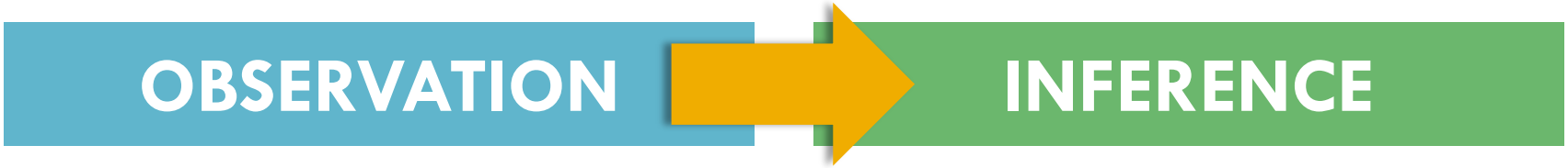
Look like?

Feel like?

Sound like?

Smell like?

Learning from Objects



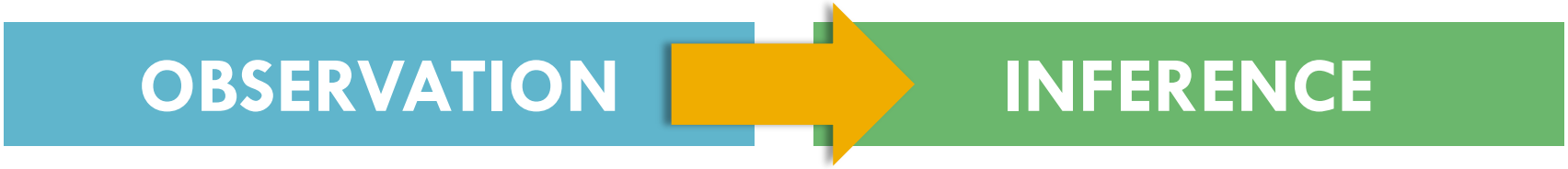
NGSS Practice: Obtaining, evaluating, and communicating information

And Now for a Little Practice…

"Reading" an Object Investigation

- What information can you find out simply by "reading" the object?
- What questions might require further research?
- What "big ideas" can the object address?

Learning from Objects

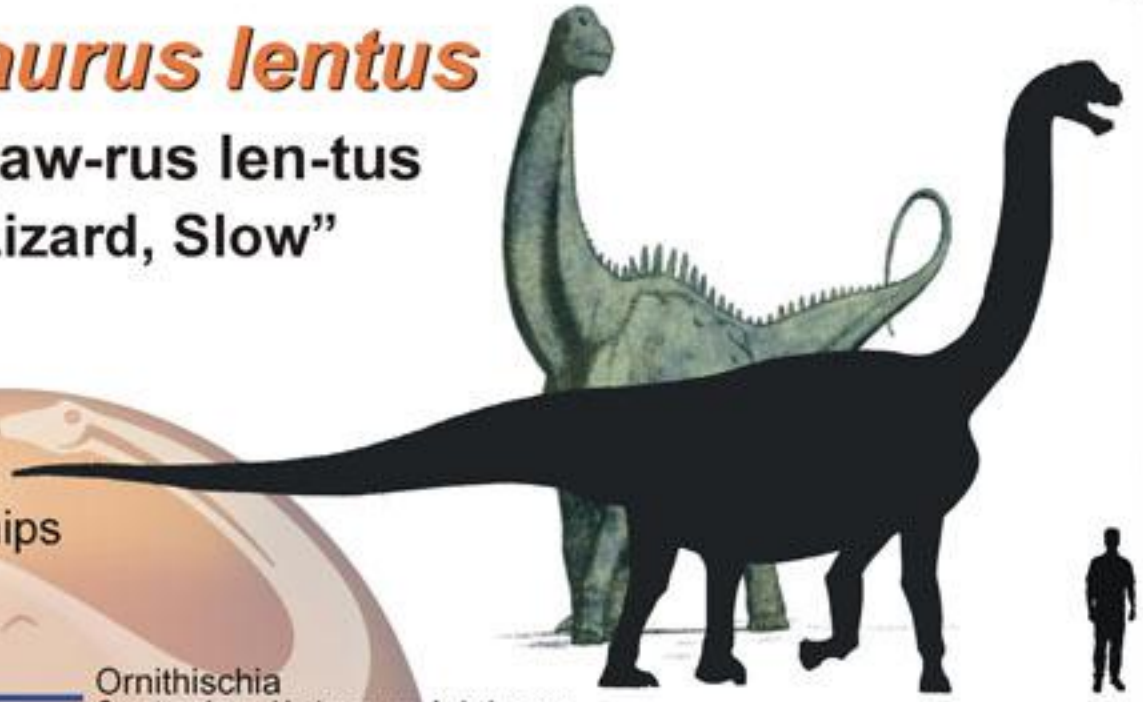


NGSS Practices: Asking questions
Constructing explanations

Camarasaurus lentus

Kam-are-ah-saw-rus len-tus

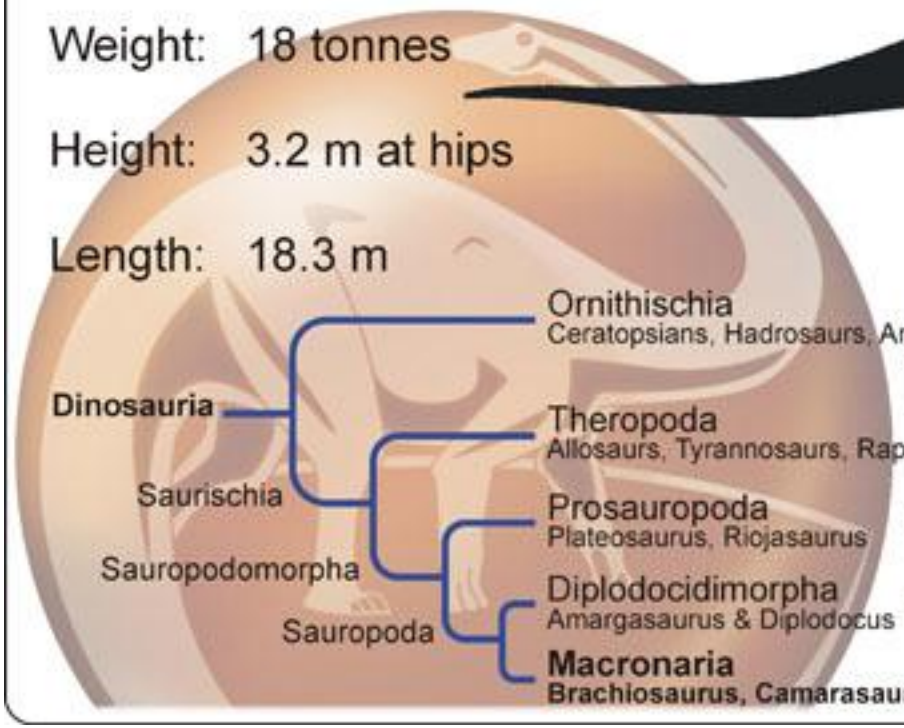
"Chambered Lizard, Slow"



Weight: 18 tonnes

Height: 3.2 m at hips

Length: 18.3 m



Time Period: **Late Jurassic**
160 - 141 million years ago

Location: North America

Described: Othniel C. Marsh, 1889

Enhance Learning with Collections

From a Single Object, Students will…

- Practice observation skills.
- Make inferences about an object's structure and function.
- Collect and record data.
- Make connections to an object's place in the "big picture".
- Communicate their ideas.
- Collaborate with peers.

From a Collection, Students will…

- Compare and contrast features and find patterns among different objects.
- Sort and categorize objects in ways that are personally meaningful.
- Develop investigable questions.

Practice Making A Collection

First

- Organize the objects at your table into groups that tell a story.
- Try reorganizing the objects into different groups at least once.
- Choose one collection that contains at least three objects to share with the larger group.

Then

- Make observations about the other groups' collections.
- Write a title for each of the other groups' collections on a post-it note and place it on their table.
- Think out of the box!

NGSS Practice: Analyzing and interpreting data

Collections Debrief

- Discuss the following questions with your original table group:
  - Can you form any groups of similar titles from those that others shared with you?
  - Are you surprised by any of the collection titles others' shared with you?
  - What might certain titles tell you about others' observations of your collection?

Creating a Mini Exhibition

First

- In groups of two or three, select three objects to make a collection.
- Think about the story your collection might tell.

Next

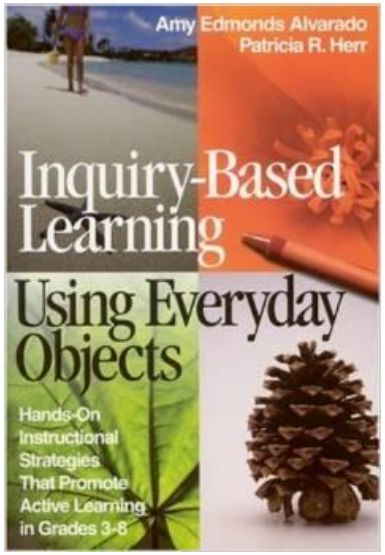
- Title your collection.
- Write a brief introduction that summarizes the story or theme for your collection.
- Write a label for each of the objects in your collection that describes the object and how it relates to the theme.

Getting Started With Objects

- **Prepare for Learning**
  - Gathering Collections
  - Creating a Space for Collaboration

- **Connect to Standards**
  - ELA Anchor Standards for Speaking and Listening & ELA Anchor Standards for Language
  - NGSS Science and Engineering Practices

- **Plan the Lesson**
  - Essential and Guiding Questions
  - Assessment



Three, Two, One

- Write down three things you learned, two questions you have, and one new idea you're excited to try.
- Be prepared to share with your table!

Resources

- Alvarado, A. & Herr, D. (2003). *Inquiry-Based Learning Using Everyday Objects: Hands-on Instructional Strategies that Promote Active Learning*. Newbury Park, CA: Corwin.
- Falk, J. H. & Dierking, L. D. (2000). *Visitor Experiences and the Making of Meaning*. Lanham, MD: Altamira.
- Shuh, J. (1982). Teaching Yourself to Teach with Objects. *Journal of Education, 7,* 1-9.
- Common Core State Standards, corestandards.org
- Next Generation Science Standards, nextgen.org

Thank you for visiting The Field Museum!

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