

# DINOSAURS ASSEMBLY, GRADES 3-5



## Concepts, Learning Goals, & Logistics

### Overview

How do scientists change their ideas when gathering new evidence? In this Nature of Science assembly, students will begin looking for weaknesses in an explanation by comparing a fossil trackway with a drawing of a dinosaur - did T. rex really drag its tail or not?

Next, students will check out more recent research in paleontology to see if the ways dinosaurs are currently depicted needs updating. They'll see how paleontologists have begun to identify dinosaurs' coloration by comparing fossils with modern animals.

They will also think like paleontologists to pursue an open question scientists are working on today! Using a model of a microraptor, students will decide for themselves how they think this dinosaur used its strange four-winged body - gliding from above or wing-powered hopping from the ground.

Finally, students will see how a decades-long global effort from geologists, geophysicists, and paleontologists discovered the crater that ended the reign of the dinosaurs and experience how collaboration is an essential part of science!

### Science Learning Goals:

- Students will identify weaknesses in explanations based on evidence presented
- Students will look at multiple sources to evaluate the merit and validity of claims
- Students will see how scientists revise interpretations based on new evidence and using new technologies

**Vocabulary Introduced:** Emphasized: • Paleontology • Evidence • Technology • Model

**Program Length:** 50 minutes

**Audience Size:** Up to 250 students

**Preparation:** Science Museum instructor brings all needed equipment and materials. School provides two tables for demonstrations and access to electricity. Allow 60 minutes before and after the program for set-up and take-down.

**MN Academic Standard Strand:** The Nature of Science and Engineering (0.1.1.2.1, 1.1.1.1.1, 1.1.1.1.2)

**NGSS Science and Engineering Practices:** Analyzing and Interpreting Data (1-ESS1-1), Constructing Explanations and Designing Solutions (1-LS3-1)

**NGSS Crosscutting Concepts:** Structure and Function (2-LS2-2)

If you have further questions on bringing programming to your school, please contact our Outreach Registration Coordinator at (651) 221-4748 or [schooloutreach@smm.org](mailto:schooloutreach@smm.org).