DINOSAURS A to Z

TEACHER GUIDE
GRADES K–2

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CHILDREN'S MUSEUM INDIANAPOLIS®

DINOSAURS A TO Z TEACHER GUIDE - K–2

Dinosaurs A to Z is a stomp through the alphabet to explore the extraordinary world of dinosaurs. Your students will learn about dinosaur species, the museum's paleontology collections, and scientific research while reinforcing literacy skills.

Twenty-six short videos, featuring paleontologist Dr. Victoria Egerton, share scientific information about a specific dinosaur. A dinosaur video is featured for each letter of the alphabet. These videos include information such as the dinosaur's scientific name and pronunciation, physical features, diet, role in the ecosystem, geologic time scale, and much more. Along with each dinosaur video, a corresponding info sheet is also available, which includes dinosaur data, a custom dinosaur illustration from Paleo Artist Jason Poole, and inquiry questions for students to use as prompts for additional reading and research.

This guide will provide a variety of tools, resources, and tips on how to extend your students' interest in and knowledge of dinosaurs.

TEACHER TIPS

- Set a specific time each week dedicated to Dinosaurs A to Z. Consistency and routine are important for students and will help them feel motivated and eager to learn about a new dinosaur each week.
- Provide students with the collector cards or a coloring sheet. After your students watch Dr. Victoria Egerton's video featuring a new alphabet letter and dinosaur, discuss what new information they learned. Students can use the black line drawings to create their own paleo art.
- Select an extension lesson to have students apply what they have learned from the Dinosaurs A to Z videos and connect to academic standards.

CURRICULUM STANDARD CONNECTIONS

Indiana Academic Standards

- **Science:** K.LS.2, K.LS.3, 1.LS.2, 1.LS.3, 2.LS.1, 2.LS.2, 2.LS.3
- **Math:** K.M.1, 1.M.1, 2.M.1, 2.M.2, 2.M.3
- **Literacy:** K.RF.2.2, K.RF.2.4, K.SL.3.2, K.SL.3.2, 1.RF.2.4, 1.SL.3.1, 2.RN.2.3, 2. RN.3.1, 2.RN.4.2, 2.SL.3.1, 2.SL.3.2

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Meet the Dinosaurs A to Z Team!

PALEONTOLOGIST:

DR. VICTORIA EGERTON,

Eli Lilly and Company Extraordinary Scientist-in-Residence

Dr. Egerton is the Eli Lilly and Company Extraordinary Scientist-in-Residence at The Children's Museum of Indianapolis. She is also a Research Fellow at the University of Manchester (UK). She has conducted extensive research and fieldwork in South America, Europe, the Caribbean, Australia, and North America and has held positions at universities and museums in both the USA and the UK.

What inspires her work:

"Curiosity inspires me and drives me to do research. I love learning new things and trying to solve puzzles. Each fossil can either be a new puzzle piece to a research question I am working on, or it can inspire new questions."

"I am one of the lead researchers and coordinators for the Mission Jurassic team. It has been exciting to have helped build this project from the ground up since it began in 2016."

PALEO ARTIST:

JASON C. POOLE

Jason C. Poole is a paleontology artist or dinosaur artist from Philadelphia, Pennsylvania. He has been published in National Geographic magazine and his art has been exhibited in several museums in the USA and the UK.

What inspires his work:

"I am obsessed with nature, science, and art. My job as a paleontology illustrator or paleo artist allows me to swirl all that around in my head to create art informed by our understanding of science."

"I am amazed by the events that lead to any dinosaur art, from a volunteer or fossil hound finding a fossil site, to the team excavating the fossil bones to fossil preparators working to preserve and understand the fossils to scientists who study the fossils. They all work with me to flesh out not only the dinosaurs but the environments they lived in millions of years ago."

DINOSAURS A TO Z CLASSROOM CONNECTIONS

Dino Names: Dinosaurs have juicy names that are fun to pronounce and spell. Compare different dinosaurs by counting their letters and syllables. For older students, explore how dinosaurs are named and create a name for a dinosaur.

Dinosaur Word Walls: Add dinosaur names to your classroom word wall, or use the dinosaur names to start one in your classroom. Invite students to consider adjectives to describe dinosaurs and add them to the classroom dinosaur word wall.

Prehistoric Stories: Have your students write and/or illustrate their own stories about the dinosaur of the week! Encourage students to include details and facts from the videos in their illustrations and stories.

Bar Graph Data Collection: Each week as you learn about new dinosaurs, add information such as diet, size, and height to a graph. Compare and contrast dinosaur species to discover the amazing diversity of these animals!

Number Line Data: Use data from the videos and coloring pages to create a number line that displays each dinosaur's geological period and age. Discuss the numbers in relation to one another. Which dinosaurs were living at the same time? Which was the oldest?

Skeleton Comparison: Compare your skeleton to a dinosaur's! Trace an outline of a student's body on a long piece of paper. Draw a bone in each part of the body outline if it is a bone that you and a dinosaur both have (examples might include your ribs, femur, or spine). What bones do we have in common? What bones did dinosaurs have that we do not?

Become a Paleontologist: Turn large bins, a sensory table, or even empty baby pools into a dig site for children to investigate and explore fossils. Add sand, rubble, and pretend fossils and bones. Let your students use sifters, brushes, and picks to experience what it would be like to be a paleontologist digging for bones.