

DINOSAUR DOT-TO-DOT

Connect the dots to reveal a picture. What kind of dinosaur do you think this is?



DIG UP! A Dinosaur Expedition

WELCOME

Welcome to *Dig Up! A Dinosaur Expedition*. You're in for an exciting adventure today as STEMmersive takes you back in time to explore dinosaurs, rocks, and minerals. Get ready to observe and investigate along with other scientists as you head off on your expedition today. No bones about it - it's an adventure not to be missed.

Thank you so much for joining Portland Oventions to experience live theater today. Live theater doesn't happen without audience members like you! I hope you have a wonderful time. After the show, don't forget to tell us about your experience. Find us on social media @portlandovations, or email us at offstage@portlandovations.org. I can't wait to hear from you.

Liz Schildkret
Director, School and Family Programs

LAND ACKNOWLEDGEMENT

Portland Oventions' programs are presented on Wabanaki land, home of the Maliseet, Mi'kmaq, Passamaquoddy, Abenaki and Penobscot Nations, their elders past and present, and future generations.

ABOUT PORTLAND OVATIONS

Founded in 1931, produces dynamic performing arts events including classical music, jazz, opera, dance, theater, and Broadway. We believe that cultural enrichment should be high quality and accessible to all. Oventions collaborates with other nonprofit organizations, education systems, and the business sector to promote lifelong learning while celebrating the power and virtuosity of the performing arts. We bring the exhilaration of the performing arts into our communities with free events as part of Oventions Offstage, connecting artists and audiences. Join us at unexpected "art happenings," classroom workshops, masterclasses, community discussions, and pre-performance lectures to explore together the relevance and connection of the performing arts to our lives.



SUPPORTED BY:

BEIMA FOUNDATION

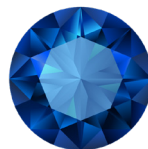


GEMSTONE MATCHING

HOW MUCH DO YOU KNOW ABOUT MINERALS?

Minerals are Earth's building blocks. They are like simple ingredients that can exist on their own or combine to form more complex structures. Rocks are usually a mixture of more than one mineral. When minerals crystalize, they form gemstones. Test your knowledge of gemstones with the matching activity below. Match the gemstone to its description and learn some fun facts along the way.

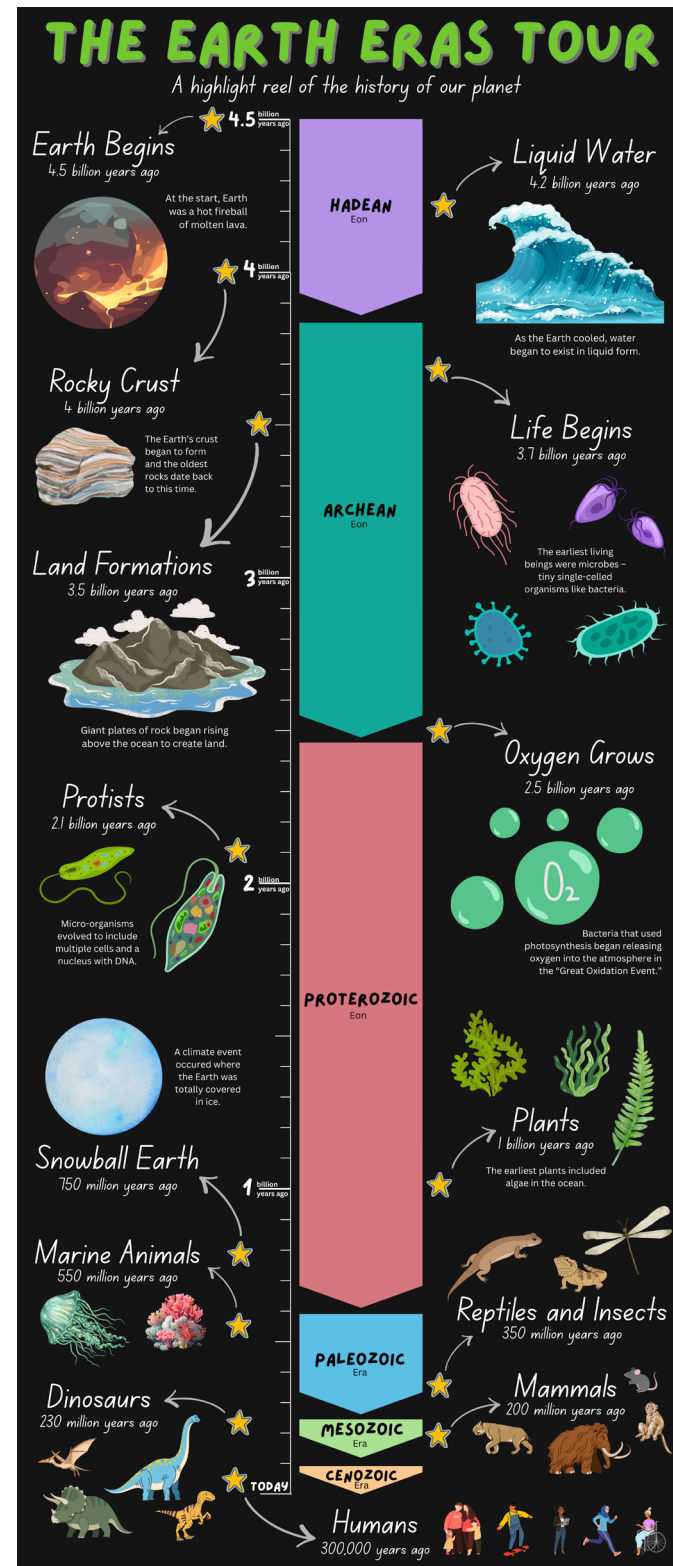
- **Peridot** is the only gem found in meteorites (yellow stone)
- **Diamonds** and **graphite** (the lead in your pencil) are made of the same element: Carbon. (white or clear stone)
- **Rubies** are one of the rarest gemstones – more rare than diamonds, emeralds, and sapphires. (red stone)
- **Sapphires** are known for their brilliant blue color, but they actually come in a wide variety of colors, including orange, green, yellow, and pink. (blue stone)
- The Ancient Egyptian Pharaoh Cleopatra loved **emeralds** – she even had her own emerald mines. (green stone)



Want more gemstone games and facts? Scan the QR Code to visit National Geographic Kids

WHEN DID DINOSAURS ROAM THE EARTH?

Dinosaurs lived a really long time ago. It was so long ago that it has to be measured in geologic time. Geologic time divides Earth's history into periods that are millions of years long. Dinosaurs were common during the Triassic, Jurassic, and Cretaceous geologic time periods – from 252 to 66 million years ago. Not all species, or types, of dinosaur lived at the same time. They also did not all become extinct at the same time. The last dinosaurs died out about 65.5 million years ago (the Cretaceous period).



WHAT DOES A SCIENTIST LOOK LIKE?

Meet Geologists and Paleontologists working today.

Dr. Anita Marshall is a geologist who studies volcanoes. She's a member of the Choctaw Nation and an advocate for including more people with disabilities in science exploration.



Dr. Melissa Kemp is a paleobiologist who studies fossils in tropical caves. She has her own lab at the University of Texas at Austin.



Dr. Karen Chin is a paleontologist who studies coprolites – fossilized poop! There is a children's book about her called *The Clues are in the Poo* by Jane Kurtz.



TAKE THE PLEDGE

Are you ready to be a Rockin' Researcher alongside these amazing scientists? Take the pledge!

WE WILL RESPECT THE EARTH
WE'RE GONNA TELL THE TRUTH
WE WILL TAKE GREAT CARE
AND WE WON'T TAKE ANYTHING THAT WILL DISRUPT THE ENVIRONMENT.