

OREGON'S DINO-STORY



Do It Yourself Museum Activity Kit Guide

**MUSEUM
OF NATURAL
AND CULTURAL
HISTORY**



UNIVERSITY OF
OREGON

Oregon's Dino-Story!

DIY Museum Activity Kit Guide

Overview

A museum adventure to go! In 2020-2021 we proudly distributed more than 26,000 pre-packaged Museum Connection Kits, helping families in every corner of the state access hands-on learning adventures, museum-style! The bilingual English-Spanish activities from those kits are now available for free to libraries to download and create their own take home activities. The online program videos can also be accessed and shared for free.

How to Use These Resources

This guide is designed to help you create your own Museum Take Home Activity Kit for your community. From supplying all the activities pages and materials, to doing an in-person event with the activities, to simply sharing some of the resources online, there are options for every need you might have.

Suggested ways to provide activities and materials to youth and families in your community:

- **Full Size Museum Activity Kits:** Print the full Museum Activity Kit guide and supporting materials. Provide the main activity supplies needed for all the activities.
- **Individual Activity Kits:** Print the activity pages individually to be used for packing smaller take home activity kits that include one or two activities and the necessary supplies.
- **Online:** Provide families with a link for visiting the program video and finding all or some of the activities online. Activities can be downloaded and posted so they are shareable from your website or social media channels.



The Dino-Story kit program is made possible with support from the [Institute for Museum and Library Services](#) and [The Ford Family Foundation](#).

- **In-Person Program:** Choose a few activities to do in-person onsite at your library, show the program video, and distribute one or two activities as a take-home kit for families that attend.

Tips and tricks for packing kits:

- Activity sheets and materials can be packed into 10"x13" flat paper bags or gallon size resealable bags.
- It's helpful to use smaller resealable bags for individual activity materials if you are including more than one activity in your kit.
- There are **printable bilingual bag labels** to attach to the take home activity kits. Download and print the [bilingual labels](#).
- If you want to include information about viewing the program video, the QR code fliers ([English](#) and [Spanish](#)) will direct participants to the specific video on the museum's Vimeo channel.

Activities

Listed below are the activities included in this program. Activities can be grouped together or done as stand-alone projects. The materials listed indicate what items participants will need to do the activity. You can include some of these materials in the take home activity bag and assume other items will be available for families at home. Tips and tricks for sourcing materials and packing are also listed below. All activities are available in English and Spanish.

1. Am I a Dinosaur?

Not all prehistoric animals are dinosaurs. In this activity, participants will figure out what makes a dinosaur a dinosaur by answering some simple questions.

Materials and Notes:

- Activity sheet: Download and print. ([English](#)) ([Spanish](#))
- Animal cards and sorting labels: Download and print. ([bilingual](#))
- Dinosaur and lizard toys or pictures: Download and print. ([bilingual](#)). Toys are more exciting and fun, but if unavailable, then the pictures will work.
- Poster: Download and print. ([English](#)) ([Spanish](#))
- Scissors



Tips and Tricks: When purchasing toy dinosaurs to include in this activity kit, remember that many dinosaur toy collections include animals that are not dinosaurs, such as Pteranodon (flying reptiles), Plesiosaur (marine reptiles), and Dimetrodon (an ancient lizard). If in doubt, you can look up the animal's name online and see if it is a dinosaur. This activity can work well as a group challenge during an in-person program after watching the program video or introducing some dinosaur basics.

2. Paleo Puzzles

Paleontologists carefully excavate, or dig out, fossils. Sometimes, the fossils they dig out include more than one animal. They sort the fossils and piece each animal back together, like a puzzle. In this activity, participants will create their own dinosaur puzzles.



Materials and Notes:

- Activity sheet: Download and print. ([English](#)) ([Spanish](#))
- Poster: Download and print. ([English](#)) ([Spanish](#))
- 14 craft sticks: the larger craft sticks work better, but any size will work. Adjust the number of sticks depending on their size. Fourteen Jumbo craft sticks will make 2 puzzles.
- Ancient animal stencils: Download and print on heavy weight paper. ([bilingual](#)) The stencils are all animals whose fossils have been found in Oregon. The activity can also be done by drawing your own dinosaur picture on the puzzle.
- Pens, crayons, or colored pencils
- Scissors
- Tape
- Paper bag: a bin or cloth bag would also work.

Tips and Tricks: This puzzle challenge can be increased by using more craft sticks, creating a picture on both sides of the sticks, or mixing multiple puzzles together in the bag. For the youngest participants, it can help to number the back of the sticks before removing the tape. The sticks can also be put into a sensory bin so that the pieces can be “excavated” like a fossil.

3. Turning to Stone – part of the Fossil Fun pages

In the four Fossil Fun activities, participants will learn about the different ways things are preserved. Most dinosaur bones are preserved by permineralization. This is when minerals are deposited in the pores, or open spaces, within the remains of a living thing and harden into stone.



Materials and Notes:

- Activity sheets (Fossil Fun pages): 3 pages. Download and print. ([English](#)) ([Spanish](#))
- Salt

- Sponge: cut up kitchen sponges into small strips about 1 inch wide. It is best to keep sponges in sealed bags and to package this activity into a resealable baggie so that the sponge does not dry out before the experiment. The results are more exciting if starting with a soft, fresh piece of sponge.
- Water
- Plate
- Cup
- Spoon

Tips and Tricks: Depending on the number of kits you are creating and your budget, you can also provide a whole small kitchen sponge and encourage participants to cut it into different shapes and sizes on their own.

4. Trapped in Time – part of the Fossil Fun pages

In the four Fossil Fun activities, participants will learn about the different ways things are preserved. Some fossils form when a living thing gets trapped in a material, such as tree sap, tar, or ice. Sometimes this type of fossil can include skin, wings, or fur!



Materials and Notes:

- Activity sheets (Fossil Fun pages): 3 pages. Download and print.
([English](#)) ([Spanish](#))
- Small object (shell, toy animal, etc.)
- Water
- Ice cube tray or cup

Tips and Tricks: A fun activity for a summer program would be to use candies frozen inside of homemade juice popsicles. These could be made ahead as a program snack or a small bag of candies, such as gummy worms, and a few popsicle sticks could be provided with the take home activity.

5. Leave a Trace – part of the Fossil Fun pages

In the four Fossil Fun activities, participants will learn about the different ways things are preserved. Fossils that show evidence of an animal's behavior or activity are called trace fossils. This includes footprints, nests, burrows, teeth marks, or even poop!

Materials and Notes:

- Activity sheets (Fossil Fun pages): 3 pages. Download and print. ([English](#)) ([Spanish](#))
- Clay or salt dough: Model Magic air dry clay can be purchased in individual 1 oz. packets and is great for showing how the fossil dries and hardens over time. You can also use playdough or homemade salt dough made with the “Dino Dough” recipe from the Keep on Exploring Page or provide families with this separate Dino Dough activity sheet that includes the recipe. Download and print. ([bilingual](#))
- Dinosaur and lizard toys: Any small animal toys would work for this activity. If creating the full activity kit, then the dinosaur and lizard toys from the “Am I a Dinosaur?” activity could also be used here.



Tips and Tricks: For an in-person program, provide a variety of different animals and have participants compare their footprints. Can they identify which animals made each footprint?

6. Make an Impression – part of the Fossil Fun pages

In the four Fossil Fun activities, participants will learn about the different ways things are preserved. When an animal or plant dies in mud, it can leave an impression, or mold, that hardens into rock. The impression can fill in with other material to make a copy, or cast, of the shape.

Materials and Notes:

- Activity sheets (Fossil Fun pages): 3 pages. Download and print. ([English](#)) ([Spanish](#))
- Clay or salt dough: Model Magic air dry clay can be purchased in individual 1 oz. packets and is great for showing how the fossil dries and hardens over time. You can also use playdough or homemade salt dough made with the Dino Dough recipe from the Keep on Exploring Page or provide families with this separate Dino Dough activity sheet that includes the recipe. Download and print. ([bilingual](#))
- Toy animals
- Small objects (shell, feather, plant, etc.)



Tips and Tricks: For an in-person program, provide a wide variety of different animals, shells, plants, and objects can be used to simulate fossils. Salt dough or Model Magic clay fossils can be made by participants and taken home to dry. To make the fossil into a pendant, use a straw to punch a hole in the clay before it dries and provide a length of yarn.

7. All Shapes and Sizes

There are over 700 different kinds of dinosaurs! In this activity, participants will see how they measure up to different dinosaurs.

Materials and Notes:

- Activity sheet: Download and print. ([English](#)) ([Spanish](#))
- Measuring tape or ruler
- Sidewalk chalk
- Animal cards: Download and print. ([bilingual](#))



Tips and Tricks: For an in-person program the Dinosaur Line Up can be done as a group activity using sidewalk chalk or using a very long rope and then attaching the animal cards to the rope at the different measurements. The longest dinosaur in the cards is 69 feet long!

8. Dino Diorama – park of the “Keep on Exploring!” page

In an ecosystem, all living things are connected and each species plays a role in making the system work. In this activity, participants can build their own food chain and food web out of paper dominos.

Materials and Notes:

- Activity sheet (Keep on Exploring page): Download and print. ([English](#)) ([Spanish](#))
- Shoeboxes or other containers
- Dinosaur toy
- Variety of craft, recyclable materials, and/or natural materials from outside



Tips and Tricks: Invite participants to bring in their dino dioramas to display at the library or to take photos and post to your social media. If you cannot provide plastic dinosaur toys, you could provide animal cards and challenge participants to create or draw the dinosaurs and then build the dioramas for them.

9. Animal Card Memory Game – part of the “Keep on Exploring!” page

In these activities participants can try to find matching cards of dinosaurs or animals that are not dinosaurs.

Materials and Notes:

- Activity sheet (Keep on Exploring page): Download and print. ([English](#)) ([Spanish](#))
- Animal Cards: Download and print. ([bilingual](#))
- Scissors



Tips and Tricks: Printing cards on heavy paper is preferred so that the pictures cannot be seen from the back side of each card.

10. Prehistoric Puppets – part of the “Keep on Exploring!” page

In this activity, participants can use the animal stencils to make stick puppets, create an ancient landscape, and put on a show.

Materials and Notes:

- Activity sheet (Keep on Exploring page): Download and print. ([English](#)) ([Spanish](#))
- Ancient animal stencils: Download and print. ([bilingual](#))
- Craft sticks
- Crayons, markers, or colored pencils
- Scissors
- Tape or glue



11. Dino Dough – part of the “Keep on Exploring!” page

In this activity participants can use the easy homemade clay to create more fossils, sculpt a dinosaur, or make props for their Dino Diorama.

Materials and Notes:

- Activity sheet (Keep on Exploring page): Download and print. ([English](#)) ([Spanish](#))
- Bowl



- Spoon
- 2 cups flour
- 1 cup salt
- $\frac{3}{4}$ to 1 cup water

Tips and Tricks: You can also use this full-page Dino Dough activity sheet if you want to provide the Dino Dough recipe separately (not as part of the Keep on Exploring! page). Download and print. ([bilingual](#))

Full Activity Guide

Includes all activity pages in one document ready to print as a full packet. The full packet also includes a cover page with an introduction to Sam, the paleontologist, who guides participants through all the activities. Additional material pages will need to be downloaded as well.

- Download and print. ([English](#)) ([Spanish](#))



Program Video

The Oregon's Dino-Story activities can be accompanied by a lively video presentation featuring interviews with scientists or other experts plus an introduction to the hands-on activities.

[Oregon's Dino-Story](#) (21 minutes)



Note: the videos were originally made to go with the take-and-make activity kits and describe the pre-packaged kits. If you are showing the video live, feel free to stop the videos at the activity kit intro part if you are not supplying the full activity kits. Also, you can make all the activities accessible to your audience by downloading and posting the activities onto your website. Families can be directed to those resources in your program announcement.

Publicity Toolkit

The Oregon's Amazing Animals publicity toolkit includes resources you can use to promote and publicize your event, including posters, flyers, photos, videos, and more.

These downloadable resources can also be found online on the [Publicity Toolkit: Oregon's Dino-Story](#) page.

Fillable Fliers

Add your event times and location, then print and post! (Found in the [Publicity Toolkit](#))

- [Download the English flyer](#)
- [Download the Spanish flyer](#)



QR Code Fliers

If you plan on sharing the program video with your community as an optional at-home experience, use the QR code fliers for ease of finding the video online. (Found in the [Publicity Toolkit](#))

- [Download the English flyer](#)
- [Download the Spanish flyer](#)



Social Media Templates

Use these customizable social media posts, along with any of the photos, art, or videos, to promote your program. Feel free to add language about how and when families can pick up the take-and-make activity kits.

FACEBOOK AND INSTAGRAM

We're excited to partner with @oregonnaturalhistory to bring you Oregon's Dino-Story—a family program that will inspire learning and fun at home. Join us on YOUR PROGRAM DATE to uncover mysteries about Oregon during the age of dinosaurs. [YOUR EVENT LINK](#)

TWITTER

We're partnering with @UO_MNCH to bring you Oregon's Dino-Story—a family program that will inspire learning and fun at home. Join us on YOUR PROGRAM DATE to uncover mysteries about Oregon during the age of dinosaurs. [YOUR EVENT LINK](#)

After your program, share the following message along with your choice of photos. We appreciate your help spreading the word about the museum's many family-friendly resources!

FACEBOOK AND INSTAGRAM

Thanks for joining us for Oregon's Dino-Story! We hope you enjoyed learning about Oregon during the age of dinosaurs. Want to explore more family-friendly science and culture activities? Visit the Museum of Natural and Cultural History at mnch.uoregon.edu/museum-home. #StayConnectedStayCurious #MuseumFromHome

TWITTER

Thanks for joining us for Oregon's Dino-Story! We hope you enjoyed learning about Oregon during the age of dinosaurs. Want to explore more science and culture activities? Visit UO_MNCH at mnch.uoregon.edu/museum-home. #StayConnectedStayCurious #MuseumFromHome

Video Promos



WHAT MAKES A DINOSAUR A DINOSAUR?

Entice your audience by sharing this 13-second video highlighting one of the key questions about dinosaurs.

[Download the video](#) and post it to your social media accounts.



THE RARE OREGON DINO

Share this fun, 11-second video featuring a dino-friend in the museum's Explore Oregon exhibit.

[Download the video](#) and post it to your social media accounts.



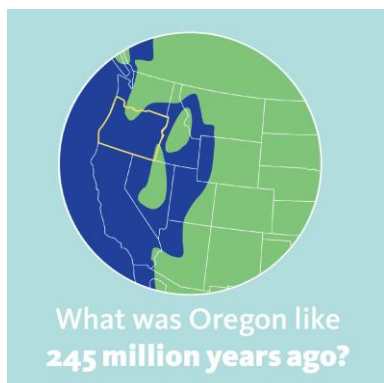
OREGON'S DINO FOSSIL

This 10-second teaser features a special fossil from Oregon's deep past.

[Download the video](#) and post it to your social media accounts.

Art and Photos

Use our original artwork to promote the program in your newsletters, on your website, and on social media. You can download the artwork, as well as publicity photos of the program activities, directly from the gallery [online](#). A few examples are included below with more available online.



Additional Resources

The Museum of Natural and Cultural History's [Explore From Home / Explora desde casa](#) pages feature hands-on science and culture activities, crafts, games, and more! Pages include a variety of topics such as Ice Age animals, Oregon basketry, plants, and the Civil Rights Movement.

The Museum of Natural and Cultural History's [Little Wonders online](#) is designed for preschoolers and their adults. Together they can download activities including crafts, games, and stories.

More About Dinosaurs

The Oregon's Dino-Story program video is a good overview of the dinosaur information that is included in the Oregon's Dino-Story activity kit. It is important to remember that you do not need to be a dinosaur expert to help kids and families explore dinosaurs. Here are a couple of websites that do a nice job of presenting the basic facts, but also allowing you to research additional questions and/or information that you are interested in knowing about dinosaurs.

- Natural History Museum (UK): [Dinosaurs](#). Best for basic overview and introduction of dinosaurs.
- American Museum of Natural History: [Dinosaur Discoveries](#). Lots of interesting dinosaur topics.
- American Museum of Natural History: [Dinosaurs: Activities and Lesson Plans](#). Educator resources on dinosaurs.