

# 2022-2023 Teaching Toolbox Usage Guide

Thank you for using the Natural History Museum of Utah's Teaching Toolbox Program! We hope that you enjoy the resources provided in this toolbox. The Teaching Toolboxes are free resources for teachers as part of the Informal Science Education Enhancement (iSEE) program. iSEE programs are made possible, in part, by the continued support of the Utah State Legislature, through the Utah State Board of Education, and through matching contributions from iSEE organizations such as NHMU. Our hope is that these boxes can help extend classroom learning, inspire curiosity, and encourage students to discover the natural world all around them.

**All toolbox specimens are sanitized between check-outs but passing objects between students may increase the chances of spread of the COVID-19 virus. When using the boxes, we do recommend following your school's sanitization, social distancing, and safety protocols. Unsure of ways to use this teaching toolbox with social distancing? We have provided a few ideas below:**

## Create a classroom "Museum Exhibit"

Bring the magic of an NHMU exhibition into the classroom! This can be done in multiple ways including:

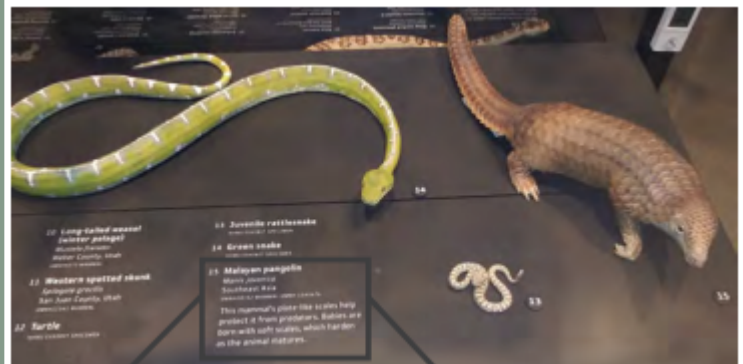
### Students as Curators and Educators

Students work in small, socially-distanced groups to curate a small exhibit in the classroom. Assign each group of students an object, or a few objects, to use for their portion. Prior to receiving the box, students can research their object(s) using the inventory lists found online and create interpretive labels to help tell their story. Once the toolbox arrives, the teacher can handle the objects to place around the room with the interpretive labels. Now the students become the educators! Have students prepare and give a tour showcasing their objects and the story they want to tell. Share this tour through digital platforms with parents or other classes.

### Teacher as Curator

Once you receive your Teaching Toolbox set up the objects around the room as if they are a small museum exhibit. Allow students to visit and look at the objects without touching them and while maintaining proper social distancing. Observing the objects can be used as a starting point for many classroom activities including the activities listed in Digital Show and Tell.

## Interpretive Label Examples



**15 Malayan pangolin**  
*Manis javanica*  
Southeast Asia  
UMNH28742 MAMMAL UMNH 1345676

This mammal's plate-like scales help protect it from predators. Babies are born with soft scales, which harden as the animal matures.

## Were dinosaur horns for defense?

Dinosaurs probably used their crests, horns, and frills to woo mates, to claim turf, to recognize their own kind, and to defend themselves. A plant-eater without large, sharp teeth would need protection from predators like tyrannosaurs. Ceratopsians had large heads with frills that shielded their necks.

## Digital Show and Tell

Distance learning doesn't mean an absence of new and exciting discoveries! Use the Teaching Toolbox museum-quality specimens to enhance learning through digital platforms.

Teachers can use the objects as a type of show and tell through classroom projections or distance learning. Although students are unable to handle the objects, or possibly see the objects in person, they can still make observations. Classroom projections or online platforms such as Zoom can allow the teacher to focus in on parts of an object or have a class discussion around specific objects or parts of an object. Use these objects as a jumping off points for writing exercises or activities such as these listed below:

## Field Journal

Have students create and use a field journal to document their discoveries. In this journal students can sketch, label, and make observations – important parts of the scientific process!

## See, Think, Wonder

Take time for students to write down what they see, what they think, and what they wonder about the object as a brainstorming activity before diving into deeper conversations.

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6-6-17 Camp Quarry 5

Sue, Paige and I all were at Camp Quarry 5 today. We collected the bones on the surface of the site first, then dug to expose the burrow we left covering the site last year. We uncovered the original accumulation of bones uncovered last year, along with the vertebrae laying on the surface and the bone Randy found and capped. Then Paige started finding more verts (disarticulated, Plat side up). She had to leave, but Sue kept finding more. At least 5 face up and 5 in an imbricated chain. Sue also found what might be the humerus. We also found a tiny distal phalanx the size of a dime. Neil thought that was pretty cool. This is going to be hard to separate for jacketing. Bruce Schumacher and Jim Rigby showed up with Neil, Dani and Paula to have a look. Paula is from University of Nevada. Randy showed up last night.

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Quarry Back wall

Roots

large jacket

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