

Museum on the Move

Teacher's Guide

This guide includes some information on each of the objects included with the Museum on the Move videos. The information is not exhaustive, but hopefully can answer some frequently asked questions about each object.

Adaptations

Animal #1



This is a freshwater turtle shell, with the spine visible inside the shell. Turtle shells are a part of their skeletal structure, specifically the ribs and spine. A good clue that it is a turtle and not a tortoise is the shape. Turtles are adapted for swimming, with flattened shells and feet off to the sides for moving through water. Tortoises are adapted for walking on land, with domed shells and feet below the shell.

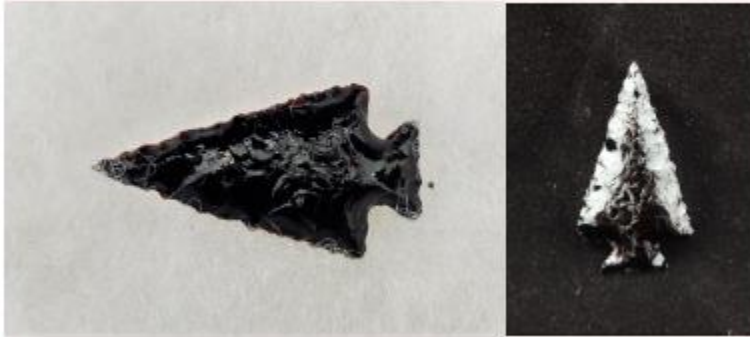
Plant #1



This is common teasel, an invasive plant in North America native to Europe and Asia. It can be found in open and sunny habitats, such as wetlands, meadows, and grasslands. The flower head, seen here, consists of hundreds of small flowers that produce **small seeds that are dispersed by the wind**. The leaves grow at ground level and form a water-collecting cup around the flowering stem. (Source: National Park Service)

Archaeology

Artifact #1



This projectile point is made of obsidian and it is sharp. The way it was carved to be sharp indicates that it was used for hunting and/or fighting. An important clue that it is an artifact is the fact that a person carved a piece of obsidian and utilized it to hunt, so it was changed by a human. If it was only a piece of obsidian it would not be an artifact, just a way cool rock.

Artifact #2



This piece of pottery was probably part of a bowl, with drawings painted in the inside part of the object. The piece is the top of the bowl because one of its sides is smooth and had some drawings that were probably part of the top of the object. The detailed drawings inside indicated that it is part of a bowl with a considerable open part at the top since it was possible to draw inside of it - if it had a small opening it would be impossible to paint the inside. Bowls were constantly used by Native Americans to prepare and store food like corn (maybe other examples like beans, squash, etc.). The drawings inside the bowl may have specific meanings for the indigenous group that made it.

Fossils

Fossil #1



This is a megalodon tooth. The shape is a clue that it is a shark tooth, and the thickness and size are evidence that it is from a megalodon. Like other sharks, megalodons had cartilage bones so the only fossils we find are their teeth. Based on the size of the teeth, paleontologists estimate that megalodons were between 10 and 18 meters long, the largest shark to have existed on earth. Megalodons lived from about 23 to 3.6 million years ago in offshore marine habitats and ate large prey, such as whales and seals.

Fossil #2



This is a trilobite fossil, an extinct arthropod. Trilobites lived in Utah between 500 and 200 million years ago, in inland oceans. A lot of them were bottom dwellers, and either scavengers, filter feeders, or predators. The fine grained texture of the rock around the fossil is a good clue that this is a marine fossil.

(Utah Geological survey)

Great Salt Lake

Animal #2



This is a raven skull. You can see the thick, strong beak, which is useful for eating many different types of food. Ravens are opportunistic feeders and will eat anything they can find: nuts, berries, meat, insects, etc. Ravens are very intelligent and adapted to live in many different habitats.

Plant #2



This is the top of a cattail, which is found in wetlands. Cattails are adapted to spread through fluffy seeds that blow in the wind, and through root networks underground. They can also store lots of nutrients in their thick root system (rhizomes).

Rocks and Minerals

Mineral #1



This is Amethyst, a type of quartz (SiO_2) that gets its purple color from trace elements in its crystal structure. A good clue that it is amethyst and not fluorite is the presence of 6-sided crystals. Amethyst typically is crystallized underground from hot water (hydrothermal) and is found all around the world.

Rock #1



This is an example of sandstone, a coarse-grained sedimentary rock. Thin, flat layers, like pages in a book, show the way the sand was deposited over time by water or wind. Sedimentary rocks like this can tell us about past environments. Sand particles are relatively large, compared to fine sand or silt, so this tells us that this environment had a lot of movement that washed away finer particles.