



Teaching Science with the Dioramas at the American Museum of Natural History (New York City)

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Every day, thousands of visitors from around the world visit the American Museum of Natural History in NYC





Through “informal science lessons,” they learn much from the models, displays, and dioramas

Exciting, effective learning during school visits or family trips come from ‘looking past the stuffed animals’ at the curved backgrounds that form continuity with the foreground





Today we take 3-dimensional museum dioramas as a normal way to display specimens and their ecosystems, but that was not always so

Many displays then and now present specimens in labelled glass cases, with no indication about their ecosystem




Some are too large to fit inside a diorama, or represent a time about which we know too little to reproduce it accurately



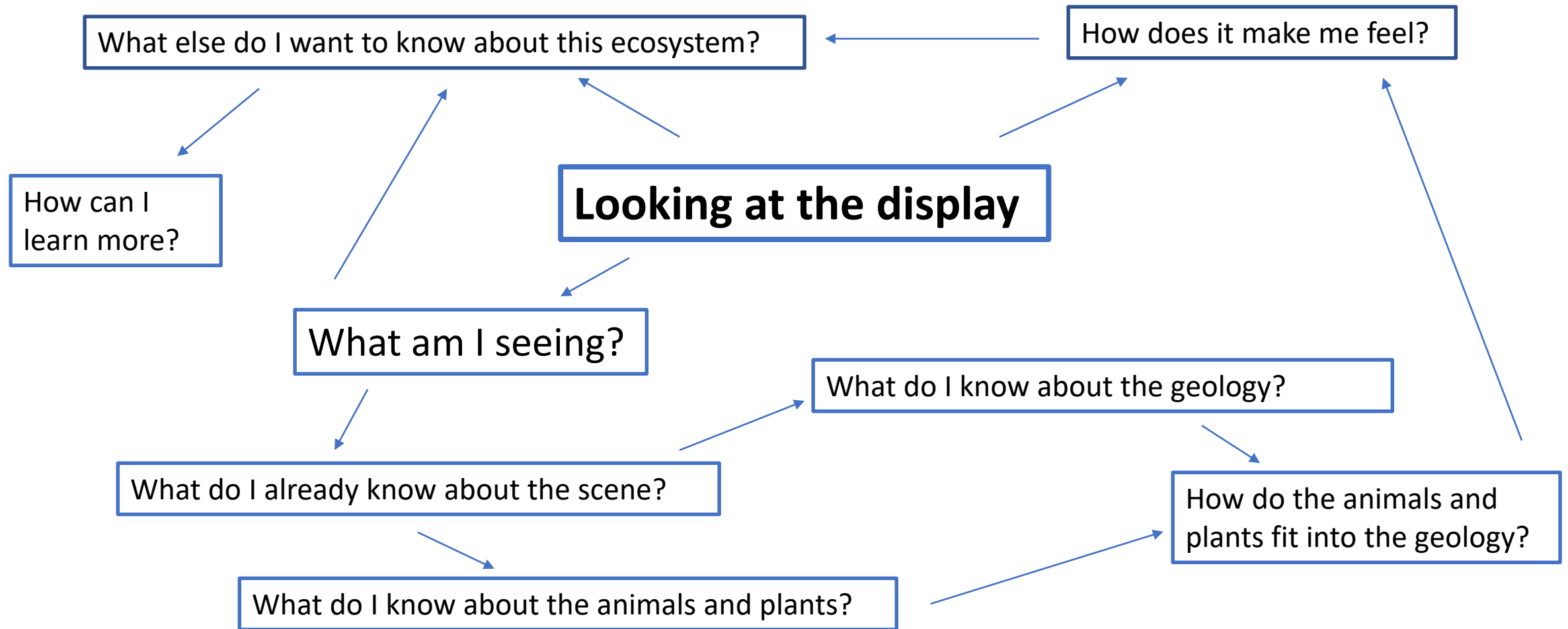


But as early as the 1920s, special collecting expeditions included trained artists to capture what the environment looked like as part of the intended display

A photograph of a rocky beach with two seals resting on the stones. In the background, a lighthouse is visible on a cliff under a cloudy sky. The text is overlaid in the center of the image.

Often it is difficult to tell where the physical features end and the 2-dimensional backdrop begins. This adds to its effectiveness.

What makes this style of learning effective?



Carl Akeley
created the first
diorama at the
Milwaukee
Public Museum
in 1880
(muskrats)

Diorama artists were among the most skilled in the world—painting on curved surfaces and avoiding a sense of distortion



Pink flamingoes painted by noted bird artist Louis Agassiz Fuertes in the Sanford Hall of North American Birds

In 1903, Frank Chapman, AMNH Curator of Birds, convinced President Teddy Roosevelt to create the first bird preserve by showing him this diorama




<https://www.amnh.org/exhibitions/permanent-exhibitions/leonard-c.-sanford-hall-of-north-american-birds/wading-birds-diorama>

In the 1920s, Carl Akeley came to the AMNH to create a Hall of African Mammals



<https://www.amnh.org/exhibitions/permanent-exhibitions/akeley-hall-of-african-mammals/gorilla>

A detailed diorama of an African savanna scene. In the foreground, a large giraffe with a brown and white patterned coat stands prominently, looking towards the left. To its left, another giraffe is partially visible, and a small antelope is grazing. In the middle ground, several antelopes with long, spiraling horns are gathered around a small water hole. The background features a vast landscape with scattered trees, a herd of animals in the distance, and a range of rugged, purple-hued mountains under a bright sky. The scene is set in a naturalistic environment with rocks, grass, and various types of trees.

Artists accompanying
the collecting trips
made 'plein air'
painting which served
as the basis for the
full-scale painting at
the Museum

Through the 1930s and 40s, Akeley's successors at the AMNH created the Hall of Asian Mammals, North American Mammals and other exhibits



<https://www.amnh.org/exhibitions/permanent-exhibitions/bernard-family-hall-of-north-american-mammals/alaska-brown-bear>

This scene includes the famous Devils Tower in Wyoming. The insert shows a photo of this laccolith butte. Visitors can learn much about places they may never have known exist.



<https://www.amnh.org/exhibitions/permanent-exhibitions/bernard-family-hall-of-north-american-mammals/mule-deer>

Dioramas allow visitors to 'experience' many different geological settings simply by moving their feet to new displays.



Lessons can be created to explore possible impacts from changing climates through web searches of the locations in the original scenes

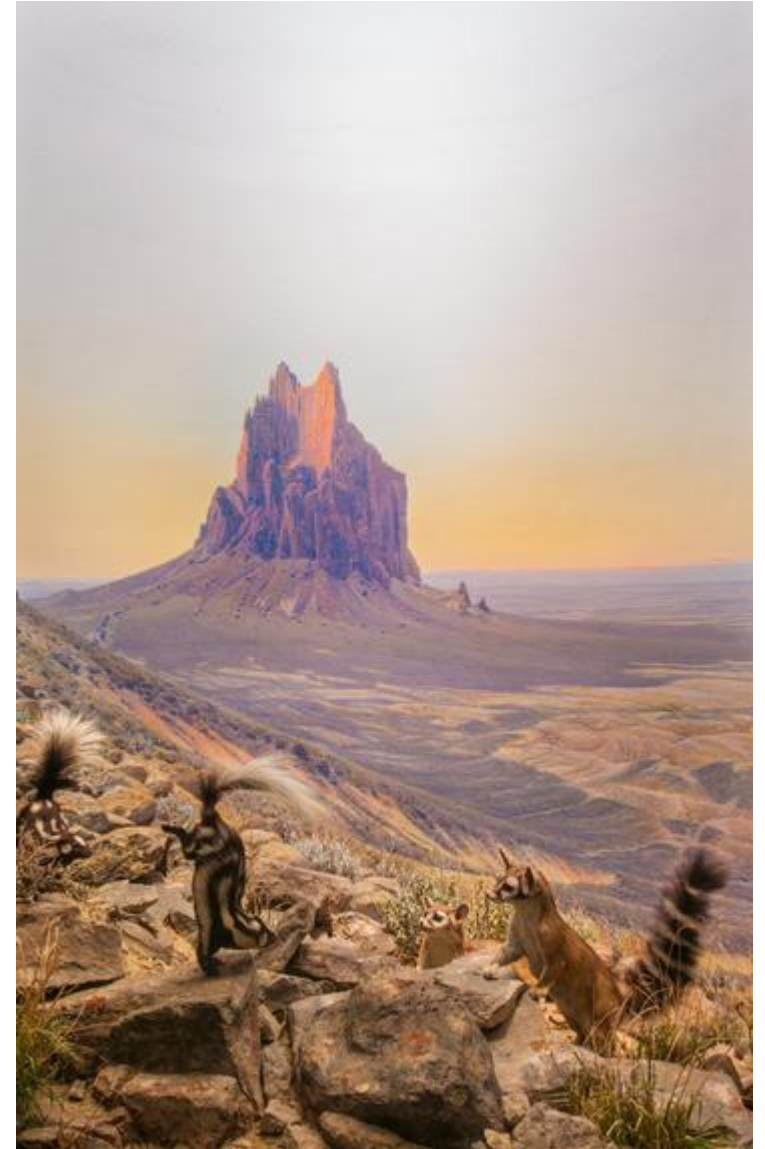
- For example, even from a different vantage point, more recent images demonstrate the melting of glaciers and the potential effects on ecosystems

<https://www.wilderness.net/NWPS/enlargeAndDetails?id=2311>



<https://www.amnh.org/exhibitions/permanent-exhibitions/bernard-family-hall-of-north-american-mammals/stripped-skunk>

Not all dioramas are large—these are in the side aisles of the Hall of North America Mammals and about 1/5 the size of the main exhibits (1 m wide). But they also show accurate geological features.



<https://www.amnh.org/exhibitions/permanent-exhibitions/bernard-family-hall-of-north-american-mammals/spotted-skunk-and-ringtail-cacomistle>

Even imagined scenes can teach much

- This display is only about a meter wide and represents events some 10 – 15,000 years ago. But it acts as a ‘time machine’ to teach about Earth’s past.

<https://www.amnh.org/exhibitions/permanent-exhibitions/bernard-family-hall-of-north-american-mammals/extinct-american-mammals-of-the-ice-age>



Some dioramas were created to teach many different concepts about specific ecosystems. This is the entrance to the Felix Warburg Hall of New York State. The location is about 150 km (90 mi) north of the Museum.

<https://www.amnh.org/exhibitions/permanent-exhibitions/felix-m.-warburg-hall-of-new-york-state-environment/an-october-afternoon-near-stissing-mountain>

Created around 1950 when populations were leaving farms and moving to cities, the NYS Hall informs visitors about rural ecosystems



This 5-part display shows changes from pre-European settlement through the 19th Century peak in farming up to the “present” (1950)





GLACIAL FEATURES IN THE PRESENT LANDSCAPE, PINE PLAINS REGION



GLACIAL HILL FORMED BY MELTING OF STRANDED ICEBLOCK



RARE PLATYCLIFF



GLACIAL HILL SHOWING STRATIFIED GLACIAL



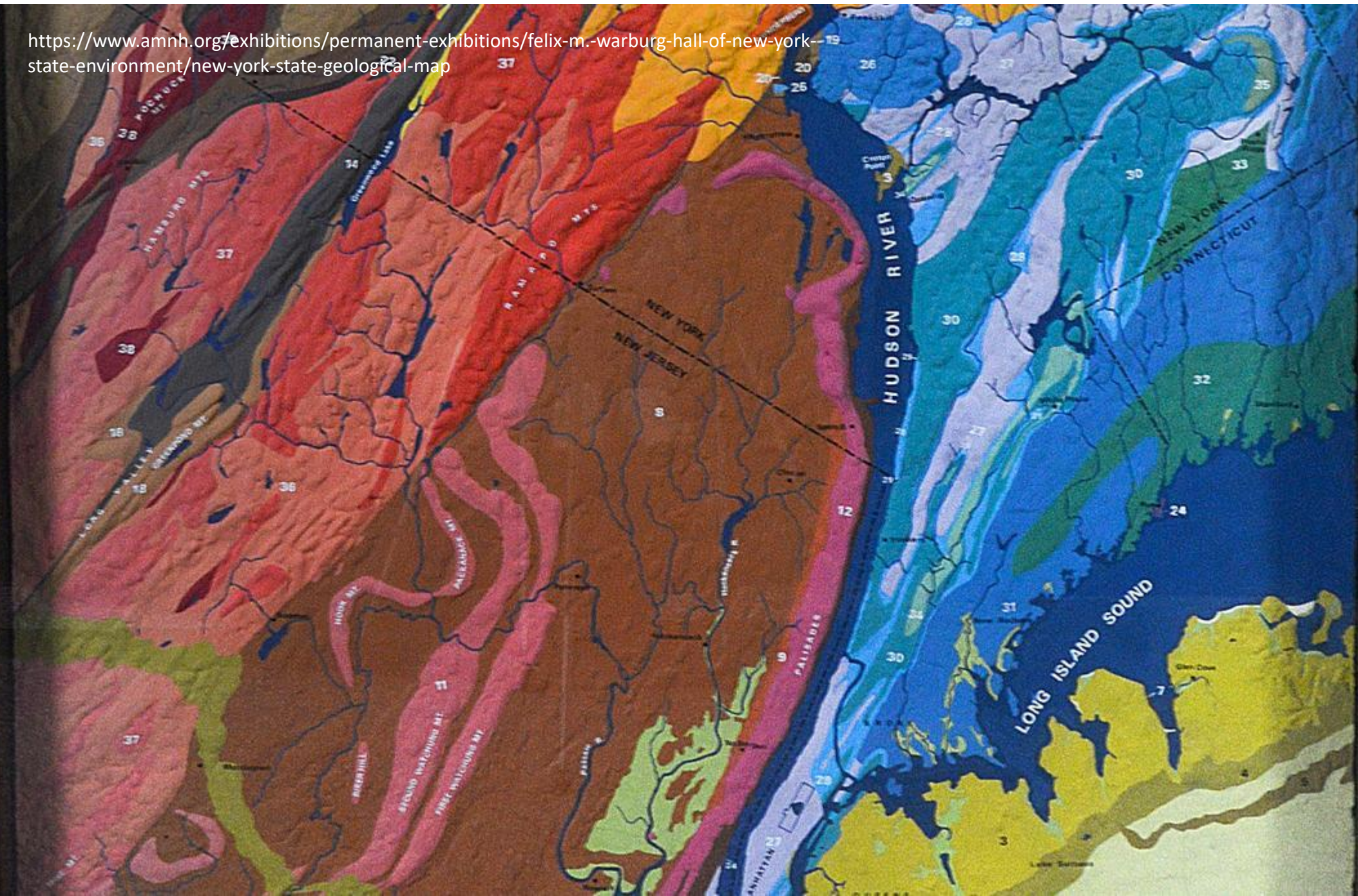
GROUP OF RARE HILLS



GLACIAL HILLS FORMED BY MELTING OF STRANDED ICEBLOCK

<https://www.amnh.org/exhibitions/permanent-exhibitions/felix-m.-warburg-hall-of-new-york-state-environment/glaciation>

<https://www.amnh.org/exhibitions/permanent-exhibitions/felix-m-warburg-hall-of-new-york--state-environment/new-york-state-geological-map>





Supplementing the displays are AMNH website articles and videos about the exhibitions

EXHIBITIONS

- SHARE
- COLLECT
- EDUCATOR RESOURCES

Location
1st Floor

Each of the 43 dioramas in the stunningly restored Bernard Family Hall of North American Mammals offers a snapshot of North America's rich environmental heritage. The hall, which first opened in 1942, focuses on 46 mammal species ranging from the nine-banded armadillo to the white-tailed deer, and its dioramas are widely considered the finest in the world.

For more than a year, a team of artists, conservators, taxidermists, and designers worked to re-color faded fur, dust delicate leaves, and selectively restore the background paintings for the historic hall's reopening in October 2012. Text accompanying each diorama was updated to offer the latest scientific information about featured species.



Many posts provide background information about how dioramas were created and the varied career skills needed

Habitat Dioramas: Early Tools for Wildlife Conservation

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by AMNH on Jan 17, 2013 12:01 pm


ON EXHIBIT POSTS

NEWS & BLOGS

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The dioramas in the Jill and Lewis Bernard Family Hall of North American Mammals have always been splendid, but after more than a year of painstaking restoration, they look better than ever. A multi-video series documents their renovation.

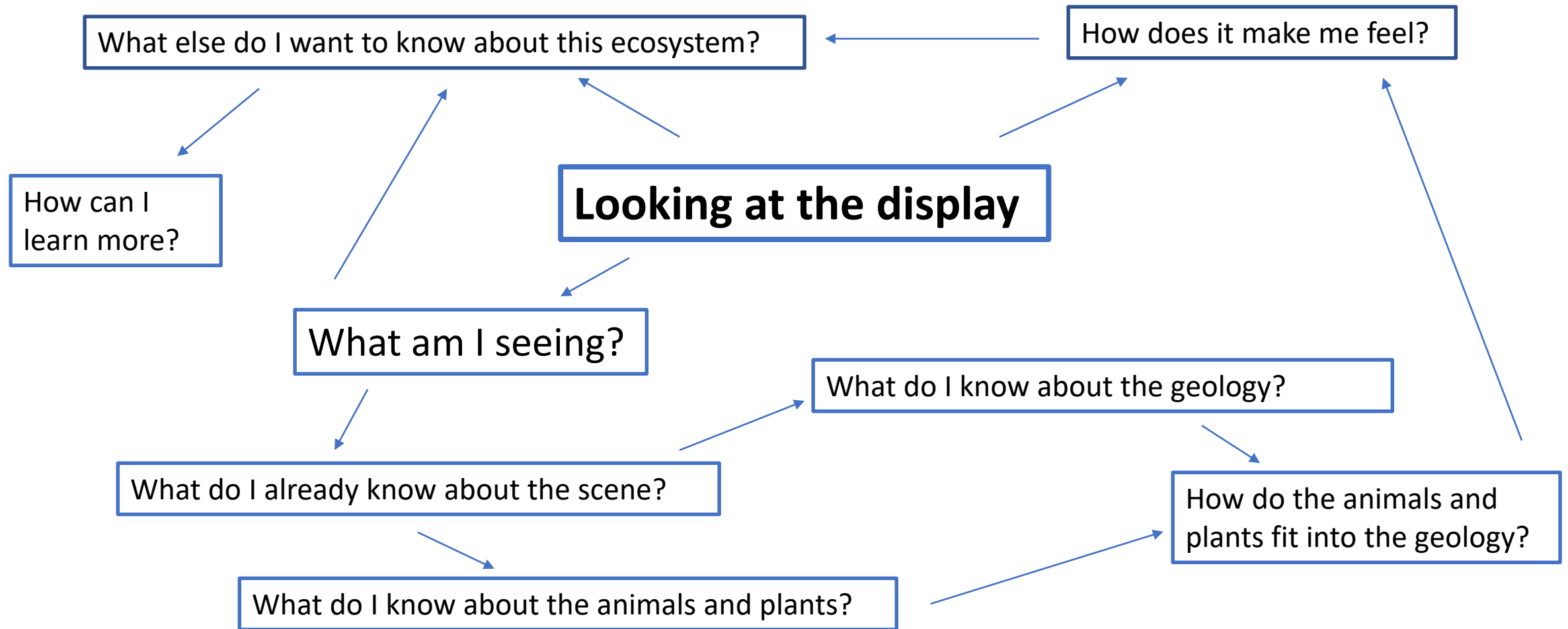
Imagine a world without computers or smartphones, television—or even color photography. Now, imagine seeing one of the Museum's habitat dioramas, such as the [Alaska brown bear](#) diorama, in the Bernard Family Hall of North American Mammals.



Close up of Alaska Brown Bear diorama, in the Bernard Family Hall of North American Mammals
© AMNH/O. Finnin

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What makes this style of learning effective?





Help your students to ‘look past the stuffed animals” and learn much about our planet!

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