Air, Water and Land

These exhibits help you discover some of the phenomena that involve interactions between air, water, and land.

Think About It

- How does moving water play a part in each exhibit?
- How do the interactions between air, water and land at these exhibits affect the environment?

How to use this guide
To help guide your visit, we have developed this learning pathway to explore a specific topic using some of the exhibit components.

- Look up the words in bold in the vocabulary list on the back.
- Continue your investigations into other areas of the museum by checking out “Where To Learn More” on the back of this page.
- Follow this path as you explore the gallery, try a different path, or create your own path and follow where your curiosity takes you!

STREAM TABLE
- How and why do the patterns in the sand change?
- What makes the sand build up in some spots and go away in others?

CLIMBING STRUCTURE
- As you climb, imagine you are a drop of water in the water cycle. What is happening to you as you climb higher?

DISCOVER R WEATHER
- How are different types of weather patterns caused by the motion of water and air?

R.O.V.
- What causes the R.O.V. move up and down?
- What are the bubbles that come out of the R.O.V. when you push “up”? Do you see the bubbles when you push “down”?

CLIMBING WALL
- Look at the different levels of sedimentary rock in the wall. What do these layers represent?
- How do you think the layers got there?

What’s Going On?
There are many closely connected systems, that can cause change in the Earth’s crust, lakes, oceans, and atmosphere. The water cycle recycles moisture by evaporation, condensation, and precipitation. The motion of air and water in our atmosphere creates different weather conditions and affects our climate. Erosion and deposition shape the Earth’s surface and can leave behind important information about Earth’s history through sedimentary rock.
Where to find more...

Exhibits
- Turbulent Landscapes
- Expedition Earth

Other Experiences
- Carlson Inquiry Room
- Wormy & Mother Nature
- Solids, Liquids & Gases

(checkbox for booking availability)

Read More About It!

Lloyd H. Barrow
Adventures with Rocks and Minerals: Geology Experiments for Young People

Earth Science Learning Resources

Joanna Cole
Magic School Bus: Inside the Earth
Scholastic Inc., 1987

Science Screen Report, v. 19 Issue 2: Climatology (VHS, 16.27 minutes)
Allegro Productions

William J. Burroughs
Watching the World’s Weather
Cambridge University Press, 1991

Joan Carrafiello, ed.
Water & Air
Globe Fearon Educational Publisher, 1995

Water Learning Resources
http://www.exploratorium.edu/ti/resources/water.html

Peter Giddings
Weather Fun
Pete Enterprises, Inc., 1991

Vocabulary

Atmosphere – The layer of gases around any planet. For Earth, it is the air that enables plants and animals to live.

Climate – A typical pattern of weather conditions for any area.

Condensation – The process of a gas cooling to form a liquid.

Deposition – The process of adding earth material (soil, rock) to an area of land.

Erosion – The gradual wearing down of rock by wind and water.

Evaporation – The process of a liquid becoming a gas.

Precipitation – Rain, sleet, snow, or hail.

Sedimentary Rock – The type of rock formed when minerals are left, buried and squashed into layers.

System – A group of things that work together for a certain purpose.

Water Cycle – The natural process of recycling water between the Earth, the atmosphere and living things.

NYS Learning Standards

CDOS1: Career Development
SS1: History of the United States and New York (3)
SS3: Geography (1,2)
SS4: Economics (1)
ELA1: Language for Information and Understanding
MST1: Analysis, Inquiry, and Design (1,2)
MST4: The Physical Environment (2,3,4,5)
MST4: The Living Environment (1,3,7)
MST5: Technology (2,3,4,6)