

SCIENCE MUSEUM OF MINNESOTA

WATER ASSEMBLY, GRADES K-2



Concepts, Learning Goals, & Logistics

GENERAL OUTLINE:

Ice Column Observations

Touch a column of ice. What do you see? What do you feel? What will happen if a really big ice column is placed under a hot light? Experiments give students ways to describe differences between a solid – ice, and a liquid – water.

A Pond in Summer and Winter

A table-top diorama helps students imagine the many ways animals living in a Minnesota pond use the water. Plants also get into the story as “water” travels through the roots, stem and leaves of a plant model. As the weather gets colder, discover what the animals and plants need to do as the liquid water changes to solid ice. See what happens with the return of spring.

People at the Pond

Think of all the different things you could do at a pond in the summer and in the winter. No matter the time of year, people need clean water to drink. The pond animals and plants need clean water too. Discover how our actions can keep the pond a healthy place for them to live.

Science Learning Goals

- Water in nature can be a liquid or solid.
- Animals, plants and people need clean water to live.
- Scientists make observations about water and how water changes.
- Water and seasons change in observable patterns.

Vocabulary Introduced:

- Solid
- Liquid
- Observation

Program Length: 40 minutes

Audience Size: Up to 150 students

Preparation: Science Museum instructor brings all needed equipment and materials. School provides two tables for demonstrations and access to electricity. Allow 45 minutes before and after program for set-up and take-down.

MN Academic Standard Strand: The Nature of Science and Engineering (0.1.1.2.1, 1.1.1.1, 1.1.1.2)

NGSS Science and Engineering Practices: Analyzing and Interpreting Data (1-ESS1-1), Constructing Explanations and Designing Solutions (1-LS3-1)

NGSS Crosscutting Concepts: Structure and Function (2-LS2-2)

If you have further questions on bringing programming to your school, please contact our Outreach Registration Coordinator at (651) 221-4748 or schooloutreach@smm.org.