

SCIENCE MUSEUM OF MINNESOTA

WATER RESIDENCY, GRADES K-2

WATER CHANGES SESSION

Students conduct a variety of experiment to explore how water can change between liquid, vapor in air, and solid. They investigate the effects of heat and wind in the evaporation process and observe how colder temperatures makes water condense on objects. A high point of the class is creating a cloud that students hold in their hands.

Program Length: 50 minutes

Audience Size: Up to 30 students

Preparation: Science Museum instructor brings all needed equipment and materials. School provides two tables for assembly demonstration and access to electricity. Allow 60 minutes before and after program for set-up and take-down. School provides classroom space for the residency sessions. Materials can be moved from room to room, or taught in a designated space with tables and chairs for students and two tables for teaching materials and equipment.

Science Learning Goals

- Identify examples of evaporation and condensation in daily life
- Conduct experiments to facilitate understanding of how water can change forms.
- Explore the differences between precipitation, evaporation, and condensation.

Vocabulary Introduced:

- Evaporation, Precipitation, Condensation

Standards

MN Academic Standard Strand

Program supports Minnesota Academic Standards and Next Generation Science Standards, including disciplinary core ideas, science and engineering practices and crosscutting concepts. More details available upon request.

SCIENCE MUSEUM OF MINNESOTA

WATER RESIDENCY, GRADES K-2

WATER CRITTERS

Students observe a variety of live macroinvertebrates collected from area streams or ponds. They learn to classify the different animals by identifying physical characteristics and matching them to a picture. Students create a group chart with the pictures of the “critters” they identified. They learn that different species can live in varying water conditions, ranging from very polluted to very clean. Students interpret their data to determine the pollution level of the source water.

Program Length: 50 minutes

Audience Size: Up to 30 students

Preparation: Science Museum instructor brings all needed equipment and materials. School provides two tables for assembly demonstration and access to electricity. Allow 60 minutes before and after program for set-up and take-down. School provides classroom space for the residency sessions. Materials can be moved from room to room, or taught in a designated space with tables and chairs for students and two tables for teaching materials and equipment.

Science Learning Goals

- Identify live macroinvertebrates.
- Interpret varieties of organisms’ data to understand how an animal’s habitat provides for its basic needs.
- Recognize the importance of having clean water for macroinvertebrates to live.
- Plants, animals and people need clean water to live.

Vocabulary Introduced:

- Macroinvertebrate/Critter, Pollution, Habitat, Data

Standards

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