Name of Exhibit: Augmented Reality Sandbox

Description: The Augmented Reality Sand Box holds sand in the box with colors that change. The changes happen ba sed on the elevation of the sand, similar to a <u>topographic map</u>. As an additional feature, make "rain" (holding hand a bove the exhibit) and observe how the water moves on the "map" showing where the waters move acting as a model of a watershed.

For all ages.

MN SCIENCE Grad Stand/Strand/Sub-strand: Number###:

OP 2.1.1.1

1E 2.2.1.1, 1E 4.1.2.1

3P 1.2.1.1

4E 1.1.1.2, 4E 2.2.1.1, 4E 3.1.1.1

6E 3.1.1.3, 6E 4.1.1.1

Grade Level(s): Kindergarten through 6th Grades

Content Area(s): Earth and Space Science; Physical Science

Learning Target(s):

- 1. I can make an argument with evidence to evaluate multiple solutions designed to slow or prevent wind or water from changing the shape of the land.
- 2. I can provide measurements from observations that provide evidence of the effects of weathering and erosion by the forces including water, wind, temperature, and vegetation.
- 3. I can make an argument based on evidence for how geoscience processes have changed Earth's surface at varying times and spatial scales.

Essential Question(s):

- 1. What are ways to prevent wind and/or water from changing the shape of the land?
- 2. How can weather affect changes in the shape of the land?
- 3. What are the effects of weathering and erosion?

Key Vocabulary in Demo: Elevation, Environment, Erosion, Geoscience, Ground Water, Minerals, Natural Resources, Rock Formation, Topographic, Watershed, Weathering