Science Standard 2 Objective 1 or 3

Math Standard 5.MD Mesurements and Data

Reading Standard RI5.10

Writing Standard W5.2, W5.7, W5.9

Social Studies Standard IV Objective 2 Indicator A

Technology/Engineering: Understand societal issues related to technology, use critical thinking to plan and make informed decisions and solve problems

Innovations to study land forms

**Erosion**

|  |  |  |
| --- | --- | --- |
| Know | Want to Know | What did you Learn |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Fill in the chart:

You are going to model erosion using the following materials:

Aluminum pan (square 32 cm X 24 cm)

Two cups (250 mL per cup=500mL) of soil per group (sand, potting soil, pea stone, mixture)**Other?**

Two cups (500 mL) of water

styrofoam cup with ~ 4 small hole—use pencil

Ruler cm

Timer

Data sheets for students

*Optional experiment*: *Blocks or books for incline/slope*

What things should stay the same from group to group?

What can we change from group to group?

What should we measure and/or draw? Responding/Dependent Variable

Make a statement using a fraction sentence about the amount of soil/Earth’s surface moved after the experiment? Record this on the board under your groups’ number.

What do you know about erosion prevention?

|  |  |  |
| --- | --- | --- |
| Know | Want to Know | What did you Learn |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Now build a model that will prevent erosion using the following materials and test the model:

Popsicle sticks

Rocks

Mesh

Plants/moss

Plastic/weed block

Small baggies-for sand bags

**Other?**

Prepare to present your group model to the class. Indicate the construction method used and if the model prevented erosion or not. What would improve your model?