# ELEMENTARY GRADES 4-6 250 WORD PROJECT SUMMARY

## **BIOLOGICAL SCIENCES**

## *Erosion proof ground covers*

This experiment looks at which ground cover works the best against erosion? The reason we chose this project was because of our love of plants and nature. Through this experiment we learned that different plants and ground covers do prevent the soil from erosion. These are the ground covers that we used: Grass, wood chips, rocks, shamrock plant, primula plant, radish plant, and sand and we had a basic sample of plain dirt. We put these ground covers over top of the dirt and they all worked pretty well. We put 10 ounces of water on each of the samples and observed which one helps prevent erosion the most. The estimate was that grass would keep the dirt in the most but after experimenting we found out that rocks with 1 ounce of water had less than grass. These were the different plants we observed: grass 2 oz ,wood chips 2 oz, sand 3 oz, Radish plant with 2 oz, primula plant had 6 oz (the first time we tried this the soil was dry so it all absorbed so we did it again, and we go 6 oz of water) NO water came out of this plant called shamrock plant so we also did it again and we got 6 oz, rocks which had the least amount of water 1 oz, plain dirt are basic sample 5 oz came out! The conclusion is that these ground covers are all super cool and work in so many different interesting ways.

### PHYSICAL SCIENCES

#### The biggest waves of the Ocean

My topic looks at how tsunami's work. I chose this topic because I would like to learn more about natural disasters, specifically tsunamis and how to stop the damage from them. Tsunamis can wipe out small structures, destroy farms and coastal cities and kill people.

I am going to create a model that shows how they form, what causes them, and how much destruction they can do to a city. For the experiment I will make a model that will simulate a real life tsunami. In this project I will create a tsunami without plants on the shore and with plants on the shore to see if it helps lessen the amount of damage done. This model be made out of a long clear box, Lego, plasticine, model magic, mini plastic plants and a sheet of metal.

My hypothesis is that the tsunami will destroy structures right on the shore and not ones far away from the shore. When the plants are there, I think it will do less damage to the structures close to the shore.