Title of Lesson: Breaking it All down (A Lesson On Erosion and Weathering)

Theme: Earth/Space Science

Unit Number: Unit Title: Rocks, Minerals, Soil and Fossils

Performance Standard(s) Covered (enter codes):

S3E1. Students will investigate the physical attributes of rocks and soils.

c. Use observation to compare the similarities and differences of texture, particle size, and color in top soils (such as clay, loam or potting soil, and sand).

d. Determine how water and wind can change rocks and soil over time using observation and research..

Enduring Standards (objectives of activity):

Habits of Mind

☒ Asks questions
☒ Uses numbers to quantify
☐ Works in a group
☐ Uses tools to measure and view
☒ Looks at how parts of things are needed
☒ Describes and compares using physical attributes
☐ Observes using senses
☒ Draws and describes observations

Content (key terms and topics covered):

Erosion
Weathering
Plateau

Learning Activity (Description in Steps)

Abstract (limit 100 characters):

Details: Begin the lesson by asking the class what they think erosion and weathering is. Continue the discussion by asking for examples of different landscapes that are formed as a result of erosion and weathering. Proceed to show the class different landscapes (e.g., the grand canyon) that are created through the process of erosion and weathering. Explain briefly how it is accomplished, heat and how it can be produce. Proceed to introduce the definitions of erosion and weathering into your explanation. Once the students understand these concepts explain to them that they are now going to observe and witness how erosion works and can makes different setting throwg the use of soil and rocks. In a back table there should be a set up of a pile of soil in a metal tray that resememble some sort of mountain. Tell the students to imagine this pile of soil to be a mountain or some sort of large plateau. Carefully put rocks on top and around the mountain or plateau. The cautiously pour a half a cup of water. Do this about two to three more times each time asking the students how the
landscape is changing. Make them understand that this is how the process of erosion and weathering works.

**Materials Needed (Type and Quantity):**
- Soil
- Rocks, Pebbles
- Metal tray
- Measuring Cup
- Water

**Notes and Tips (suggested changes, alternative methods, cautions):**
- **Modification/Alternative methods:** Put paper towel under tray to avoid big mess.
- **Cautions/Safety Concerns:** Make sure students do not touch soil or try to put anything in their mouths.

**Sources/References:**
1)
2)
3)