Emem Adolf
Earth Science
Grades Kindergarten-2nd Grade
Charting the Weather in the United States

Objective/Purpose:
The purpose of this activity was to teach the students how to read weather maps and to show them how useful data could be obtained. In order to complete this activity, the students were engaged in a sorting exercise, learned what symbols were and how to use a map key. The activity is useful because it is very holistic in that many skills are necessary to complete the activity.

Georgia Performance Standards:
- S1CS4: Students will use the ideas of system, model, change and scale in exploring scientific and technological matters.
- S1CS5: Students will communicate scientific ideas and activities clearly.
- S1E1: Students will observe, measure, and communicate weather data to see patterns in weather and climate.

Materials (for a class size of 20):
- Extra large bag of plain M&M's or Skittles
- Crayons
- Weather section from newspaper
- Accompanying worksheets
  1. Charting the Weather in the United States
  2. Charting the Daily Weather (Homework Assignment)
- Plastic sandwich baggies
- Paper towels

Time Required for Activity:
The time required for this activity can be anywhere from 30 minutes to one hour. This is one of the great things about this activity because you are able to determine how many regions of the weather map you would like for the students to reproduce. This activity can be done with a whole class or in a small group setting.

Preparation:
The time involved in preparing for this activity is minimal. You just need to buy the M&M's and print the accompanying worksheets the day before presenting this activity to the students. M&M's should be portioned out into the baggies (one for each student). One handful of M&M's per bag should be adequate to complete the activity.

Safety Issues:
Before activity confirm whether any of the students have an allergy to chocolate. If some students are allergic, substituting M&M's for Skittles can modify the activity.
Activity Outline/Teacher Procedure:
1. Pass out 5-6 crayons to each student (red, orange, yellow, blue, brown, green, or colors that represent all the colors in the candy used for the activity).
2. Hand out candy-filled baggies, one paper towel, and a map of the United States (worksheet 1) to each student.
3. Ask students to tell you about the weather today.
4. Show students the weather section from the newspaper and then ask them questions (listed in Possible Questions section, see below). After each question, example to students what appropriate answer is.
5. Ask the students to open their baggies of M&M’s and place on the paper towel. Have students sort the candy based on colors. Note: Some students may need extra colors so make sure that you have some extra M&M’s on hand.
6. Then discuss with students which color M&M’s they would like to represent a certain weather condition. For example, if students decide that blue M&M’s will represent rain, have them draw a blue dot on the bottom of their map with an equal sign next to it and the word rain ((blue)=rain). Repeat this activity for the remaining candy colors.
7. After students have completed their map legend, point to a certain state on their map and then tell the students what the weather is like. The student then will place the corresponding M&M on their map to represent the weather condition. Repeat this step as many times as you like or until the M&M’s run out.
8. The have students take crayons and draw circles around the different regions of M&M’s. For example, the students should draw a blue circle around the blue regions of M&M’s.
9. After students have drawn circles around each M&M, they can place the candies back on their paper towel. Have student color in each circle region with the appropriate color. After this, the students can eat their candies.
10. Evaluate and assess what students have learned from activity. See below.

Possible Questions:
-What is a map?
-What are symbols?
-Why are symbols useful and what can be learned from them?
-How can you look at a weather map and know what the weather is like in a certain state?

Assessment/Evaluation:
Ask students what their favorite part of the activity was or one thing they learned from the activity. Next, ask the students to look at their maps and have each student tell you what the weather is like in one state (the student should be able to use color symbols and tell you what the weather condition is like). Finally, ask students to answer the possible questions again as a post-activity assessment on whether they grasped concepts discussed throughout the activity.

Home and School Connection:
Handout worksheet 2 as homework. Have them record the weather conditions for the week. They will need to fill out the days of the week and create their own map key to record the weather conditions for the week.
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