

Meteorologist for the Day

4th Grade

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1. References:

- “Describing Weather” lesson plan from 4th grade curriculum guide

2. Benchmarks:

ES-4 & ES-5 (Benchmark D): Describe weather by measurable quantities such as temperature, direction, wind speed, precipitation, and barometric pressure. Record local weather information on a calendar or map and describe changes over a period of time.

3. Objectives:

Understand that weather maps contain symbols that are used to represent the weather conditions.

4. Materials:

- Overheads with several weather maps from internet
- Overhead with weather symbols
- Newspaper containing weather map
- Worksheet and map from weather journal

5. Initial Demonstration:

Show the students a recent newspaper that contains the nations weather forecast. Explain that a local meteorologist prepared the map based on information collected using the various scientific instruments previously discussed. Also point out that there are many symbols and colors on the map used to denote specific weather conditions and temperatures for specific regions. The key point to stress is that symbols are used because they are small and can fit on the map, rather than writing very small words on the map. Explain that a symbol is a picture used to represent something. This will introduce the students to weather maps and their symbols so that they can now act as meteorologists and prepare their own maps based on information collected throughout the United States.

6. Target Observations:

- Different regions within the United States are colored differently because of the variable temperatures.
- Windy conditions typically exist more along coastal regions rather than inland.
- Weather symbols are used to represent weather conditions.

7. Target Model:

- Using weather symbols and data collected from various cities, the students should be able to locate cities on a map, followed by labeling them with the correct weather symbols and information.

8. Procedure:

Have the students turn to **Page 17-18** in their weather journals. Explain to the students that they will be meteorologists by preparing a weather map that will be placed in the local newspaper. Using the information and symbols on **Page 17**, they will place the correct symbols on the map on **Page 18**. Once the map is complete, read the questions at the bottom of **Page 17** allowed to the students and have them record their answers in the weather journal. This activity will be done individually. Once the class has completed the activity, read the questions aloud again, and call on certain students to stand and explain their answers to the rest of the class.

9. Target Observations:

- Weather maps and their symbols are not difficult to read or prepare. Once the symbols become familiar, one should be able to read a weather map and understand what the local conditions may be.

10. Revised Target Model:

- Specific areas of the United States are more likely to have specific weather conditions when compared to other locations. This could be due to elevation changes, location relative to bodies of water, etc. Also, knowing the weather in one location will help predict the weather in another location based on the typical direction that weather moves across the United States.

11. Summary:

Students have prepared their own weather map using data collected from various cities. The students will become familiar with the standard symbols used to represent weather conditions. The students will also get a review of the forms of precipitation and seasons.