# DYNAMIC® LEARNING MAPS

### **Science Instructional Activity** – page 1 of 3

<b>Target Level</b> Interpret basic weather information (e.g., radar, map) to make predictions about future conditions (e.g., precipitation, temperature, wind).	<b>Precursor Level</b> Interpret basic weather information (e.g., radar, map) to compare weather conditions (either over several days at the same location or at different locations on the same day).	Initial Level Interpret basic weather information (e.g., radar, map) to identify weather conditions.	<ul> <li>Accessibility Considerations for Science and Engineering Practice: Analyzing and Interpreting Data</li> <li>Access information through concrete pictures and/or physical scale models (e.g., tactile displays).</li> <li>Represent relevant relationships with diagrams showing only the most relevant information.</li> </ul>	
<b>Activity Title</b> Weather Watchers	<b>Estimated Classroom Time</b> <b>Needed</b> One session	<ul> <li>Essential Questions</li> <li>Does the student understand that weather conditions are different in different locations?</li> <li>Does the student understand that weather conditions can change?</li> <li>Can the student use information about weather when presented in basic formats?</li> </ul>		
Suggested Materials Picture response cards and/or tactile representations of weather symbols, picture response cards and/or tactile representations of forecasts, story that highlights weather conditions		<b>Engage Students in the Activity</b> Begin a discussion about weather. Ask questions such as, "What is your favorite type of weather?" "What is the weather like today?" Talk with students about why people might want to predict weather (e.g., knowing what to wear, preparing to travel, planning for an event). Ask students how they think weather is predicted (e.g., forecasts).		
The following website provides a list of books that may be used or adapted: <u>http://www.nsta.org/recommends/</u>				

#### **Activity Description**

Define (throughout the activity): weather, rain, snow, sunny, cloudy, windy, warm, hot, cold

Step 1: Read a story to the students that highlights weather conditions. Following the reading, talk about the weather conditions in the story. Alternatively, students can tell a story about their own life and identify the weather (using picture response cards or tactile representations). Present students with weather symbols (picture response cards or tactile graphics) and have them match them to the corresponding weather condition.

Example:



is the symbol for rain.

Step 2: Present the students with a weather report (in picture format or tactile graphics; examples shown below). Ask students to identify the weather condition from the information presented on a report. For example, ask "Which day did it rain?" Provide multiple weather reports to practice answering questions regarding precipitation and temperature (the

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mentioned words are not required vocabulary at this level). Students can also be given a weather report of two locations (as in the example below) and compare the two. For example, "Which city was warmest?" Explain any inaccuracies and have students indicate how they arrived at a correct answer (e.g., students indicate the rain symbol after correctly identifying the day that it rained). To connect to real-word scenarios, discuss what the weather condition means for the students, such as clothing choices and activities.





Step 3: Explain to students that people try to predict the weather. People who study the weather often report weather forecasts on the news. Present the student with a weather forecast (visual picture cards or tactile graphics) for an upcoming period of time. Ask the students questions such as, "Which day does the forecast predict the weather will be the coldest?" "Which day does the forecast predict there will be rain?" Provide multiple weather forecasts for practice in answering questions regarding precipitation and temperature (the mentioned words are not required vocabulary for DLM at this level). Be mindful of talking about weather conditions and not seasonal patterns.



Ideas for Differentiating the Activity					
At the Target level:	At the Precursor level:	At the Initial level:			
Students will be able to predict weather conditions using weather forecasts.	Students will use a weather report to compare conditions in two places or over two time points (e.g., days, weeks, months).	Students will match weather conditions to weather symbols.			
Checks for Understanding					
At the Target level, students will:	At the precursor Level, students will:	At the Initial level, students will:			

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