

### Grade 5 Weather Research Project

Date: February 10, 2010

Grade/Class/Subject: 5th Grade / Math

**Unit/Theme:** Weather / Graphing

**NYS Content Standards:**

Standard 1 - Students use mathematical reasoning to analyze mathematical situations, make conjectures, gather evidence, and construct an argument.

Standard 7 - Students use patterns and functions to develop mathematical power, appreciate the true beauty of mathematics, and construct generalizations that describe patterns simply and efficiently.

**WIDA ELP Standards:**

Standard 3: The Language of Mathematics, Speaking, Level 3 - Connect new information about math operations to previous experiences using realia or manipulatives

**Content Objective(s):** Students will understand and create bar graphs, pictographs, line graphs, and pie charts. Students will record and analyze weather information. Students will make weather predictions based upon their analysis

**Language Objective(s):** Students will orally communicate lesson content and opinions while correctly using key vocabulary terms. Students will demonstrate an understanding of curriculum concepts through the creation of a diverse array of graphs.

Key Vocabulary	Supplementary Materials	
Line graph, pictograph, barometer, humidity, thermometer, Fahrenheit, Celsius, cumulous, stratus, nimbus	Thermometers, barometers, graph templates, graphic organizers	
SIOP Features		
Preparation	Scaffolding	Grouping Options
<input type="checkbox"/> Adaptation of content <input type="checkbox"/> Links to background <input checked="" type="checkbox"/> Links to past learning <input checked="" type="checkbox"/> Strategies incorporated	<input checked="" type="checkbox"/> Modeling <input type="checkbox"/> Guided practice <input checked="" type="checkbox"/> Independent practice <input checked="" type="checkbox"/> Comprehensible input	<input type="checkbox"/> Whole class <input type="checkbox"/> Small groups <input type="checkbox"/> Partners <input checked="" type="checkbox"/> Independent
Integration of Processes	Application	Assessment
<input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Writing <input checked="" type="checkbox"/> Speaking <input checked="" type="checkbox"/> Listening	<input checked="" type="checkbox"/> Hands-on <input checked="" type="checkbox"/> Meaningful <input checked="" type="checkbox"/> Linked to objectives <input checked="" type="checkbox"/> Promotes engagement	<input checked="" type="checkbox"/> Individual <input type="checkbox"/> Group <input type="checkbox"/> Written <input checked="" type="checkbox"/> Oral