Student: Kaleigh Narracci Date: 2/13/12

Grade: 6 & 7 Topic: Weather Quiz Content Area: Science

**Instructional Objective**

Objective: After the completion of multiple lessons on weather, the students will complete a ten question quiz on weather. They will do so with seventy-five percent accuracy.

**Standards and Indicators**

NYS Science Learning Standard #4:

The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

Key Idea #2.2i-2.2q/ P.S. 2.2i-2.2q:

Students should develop an understanding of Earth as a set of closely coupled systems. The concept of systems provides a framework in which students can investigate three major interacting components: lithosphere, hydrosphere, and atmosphere. Processes act within and among the three components on a wide range of time scales to bring about continuous change in Earth’s crust, oceans, and atmosphere.

* Weather describes the conditions of the atmosphere at a given location for a short period of time.
* Climate is the characteristic weather that prevails from season to season and year to year.
* The uneven heating of Earth’s surface is the cause of weather.
* Air masses form when air remains nearly stationary over a large section of Earth’s surface and takes on the conditions of temperature and humidity from that location.
* Weather conditions at a location are determined primarily by temperature, humidity, and pressure of air masses over that location.
* Most local weather condition changes are caused by movement of air masses.
* The movement of air masses is determined by prevailing winds and upper air currents.
* Fronts are boundaries between air masses. Precipitation is likely to occur at these boundaries.
* High-pressure systems generally bring fair weather. Low-pressure systems usually bring cloudy, unstable conditions. The general movement of highs and lows is from west to east across the United States.
* Hazardous weather conditions include thunderstorms, tornadoes, hurricanes, ice storms, and blizzards. Humans can prepare for and respond to these conditions if given sufficient warning.

Indicator:

This will be evident when the students complete a ten question quiz on weather.

General Skills:

Students will follow safety procedures in the classroom and laboratory.

Indicator:

This will be evident when the students complete a ten question quiz on weather.

**Motivation**

The students and teacher will have a short review/question and answer session.

**Materials**

* SMART Board
* Laptop
* Weather Quiz

**Strategies**

Quiz: The students’ knowledge will be assessed using a quick ten-question quiz.

**Adaptations**

The children with severe learning disabilities will have the weather quiz read to them.

**Differentiation of Instruction**

Tier 1: the students will complete a ten question quiz on weather while having the quiz read to them.

Tier 2: The students will complete a ten question quiz on weather.

Tier 3: The students will complete a ten question quiz on weather and then answer science questions on Achieve 3000.

**Developmental Procedures**

* The students will have a question and answer session with the teacher. *(What questions do you have?)*
* The students will take a ten question quiz on weather. *(Any questions? Does anyone need help?)*

**Assessment**

The students will complete a ten question quiz on weather. They will do so with seventy-five percent accuracy.

**Independent Practice**

For homework, the students will complete the BrainPop worksheet on weather and weather forecasting.

**Follow-Up: Direct Teacher Intervention and Academic Enrichment**

Direct Teacher Intervention: The student, under direct intervention with the teacher, will review the quiz and make corrections.

Academic Enrichment: The students will review their notes on air masses, fronts and severe weather.

**Teacher References**

BrainPop. (2012). *Weather activities*. Retrieved from http://www.brainpop.com//science/weather/weather/activity/

Bunch, B., & Branca, B. (1987). *Globe earth science*. (2nd ed.). Englewood Cliffs, NJ: Globe Book Company.

Daniel, Rillero, Snyder, & Zike, (2007). *Glencore science: New york science*. New York, NY: McGraw-Hill Education.

Denecke, E. (2008). *Let's review: Earth science the physical setting*. (3rd ed.). Whitestone, NY: Barron's.