Student: Kaleigh Narracci Date: 2/11/12

Grade: 6 & 7 Topic: Severe Weather: Hurricanes and Blizzards Content Area: Science

**Instructional Objective**

Objective: After the completion of a class discussion on hurricanes and blizzards, the students will build a perfect hurricane on create-a-cane.com while recording this information in a four-tab hot dog foldable. The students will score at least an 80 on the game website for creating a perfect category 5 hurricane.

**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 #2.2p/ P.S. 2.2p:

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.

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 build a perfect hurricane on create-a-cane.com while recording this information in a four-tab hot dog foldable.

General Skills:

Students will follow safety procedures in the classroom and laboratory.

Indicator:

This will be evident when the students build a perfect hurricane on create-a-cane.com while recording this information in a four-tab hot dog foldable.

**Motivation**

The students will listen to the Phillip Phillips song Home remix for Hurricane Sandy and look at images of Sandy’s destruction. Then they will write about their experience with Hurricane Sandy.

**Materials**

* SMART Board
* Laptop
* Music Clip
* Images of Hurricane Sandy
* Internet: Website Game
* Construction paper
* Scissors

**Strategies**

Direction Instruction: the teacher will deliver notes on hurricanes to the class.

Game Activities: the students’ participation in game-like activities makes the learning process less rigorous so more learning can occur. The students will complete a game to make a “perfect” hurricane which will increase their understanding of what different elements work together to create hurricanes.

Cooperative Learning: the students will work together to discuss and chose the proper elements that make a perfect hurricane during the game.

**Adaptations**

The children that were severely affected by Hurricane Sandy will receive forewarning of the Do Now’s nature.

**Differentiation of Instruction**

Tier 1: The students will build a perfect hurricane on create-a-cane.com while recording this information in a four-tab hot dog foldable with specific instructions as to what information to copy down.

Tier 2: The students will build a perfect hurricane on create-a-cane.com while recording this information in a four-tab hot dog foldable.

Tier 3: The students will build a perfect hurricane on create-a-cane.com while recording this information in a four-tab hot dog foldable and help other students complete the task.

**Developmental Procedures**

* The students will listen to the song remix and write about their experiences with Hurricane Sandy. *(Where were you during Hurricane Sandy? How were you affected?)*
* The students will discuss what hurricanes are and receive notes. *(What makes these storms so powerful? What category was Hurricane Sandy? What if it was stronger?)*
* The students will play the create-a-cane game, creating the perfect storm while writing the information inside a four-tab hot dog foldable. *(Do you need help? What do you think makes a strong hurricane? What type of air mass? Pressure System?)*

**Assessment**

The students will build a perfect hurricane on create-a-cane.com while recording this information in a four-tab hot dog foldable. The students will score at least an 80 on the game website for creating a perfect category 5 hurricane.

**Independent Practice**

For homework, the students will complete a chart that labels the different characteristics of the forms of severe weather discussed in class.

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

Direct Teacher Intervention: The student, under direct intervention with the teacher, will watch the National Geographic Hurricanes 101 and discuss the causes and effects of hurricanes.

Academic Enrichment: The students will create a Venn Diagram comparing and Contrasting Hurricane Sandy and Hurricane Katrina.

**Teacher References**

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

COMET Program. (Producer). (2002). *Create-a-cane*. [Web Graphic]. Retrieved from http://www.nhc.noaa.gov/outreach/games/canelab.htm

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

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National Geographic. (Producer). *Hurricanes 101*. [Web Video]. Retrieved from <http://video.nationalgeographic.com/video/kids/forces-of-nature-kids/hurricanes-101-> kids/