**ELL LESSON PLAN**

Grade Level/Subject: 1st Grade Science

Prerequisite Knowledge:

* Students should know what a tornado is
* Students should know about different weather phenomenon
* Students should be able to write informatively or present an oral, informative report

Approximate Time: 50 minutes

Student Objectives/Student Outcomes:

* Students will be able to show the general locations of hot and cold air on a map
* Students will be able to explain or show what happens when hot and cold air collide
* Students will be able to understand how a tornado forms
* Students will be able to locate Tornado Alley on a map
* Students will be able to share their thoughts within a group setting

Content Standards:

**4.A.1d** Use visually oriented and auditorily based media.

**4.A.2b** Ask and respond to questions related to oral presentations and messages in small and large group settings.

**4.B.1a** Present brief oral reports, using language and vocabulary appropriate to the message and audience (e.g., show and tell).

**11.A.1a** Describe an observed event.

**12.E.1b** Identify and describe patterns of weather and seasonal change.

WIDA English Language Proficiency Domains:  
**Listening**: Process, understand, interpret, and evaluate spoken language in a variety of situations  
**Speaking**: Engage in oral communication in a variety of situations for a variety of purposes and audiences

**Writing:** Engage in written communication in a variety of forms for a variety of purposes and audiences

Materials/Resources/Technology: overhead, chalkboard, or Smart board, red marker, blue marker, paper

Implementation:

Time

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| <5 minutes | Opening of lesson:  After bringing the students to the carpet area, the teacher will ask students if they recall the video of a tornado that they watched earlier in the week (during the lesson on modeling). Then, she will ask students if they have any ideas about how tornadoes form. After accepting a few student ideas, the teacher will describe that they will be learning about how and why tornadoes occur. She will tell them that by the end of the lesson they will be tornado experts and they will tell the class what they know. She will quickly remind the students of the expectations while engaging in a lesson on the carpet. |
| 35 minutes | Procedures:  On an overhead, chalkboard, or Smart board, the teacher will have a map of the United States. She will ask students where on the map there is more hot air and where there is more cold air. To prompt the students, the teacher could highlight the idea of the warm equator and the cold poles. Based on student responses, the teacher will have a student come up and use a red marker or piece of paper to represent hot areas and a blue marker or paper to represent cold areas. The teacher will note that the hot air and the cold air must collide somewhere. The students can also pantomime hot and cold by pretending that they’re sweating or freezing, for example. She can ask questions such as:   * What do you think might happen when this air collides? * Where on this map does the hot air and cold air collide? Which states are in this area? * Where on this map do you think a lot of tornadoes occur?   The teacher will respond to student responses and also explain how tornadoes occur. She will go over what occurs when the hot air from the South collides with the cold air from the North and why this occurs. She will use hand gestures to show the air collision and resulting funnel cloud. Additionally, she will discuss “Tornado Alley,” which is the area of the United States in which the most tornadoes occur. She will have a student come up and label “Tornado Alley.” The teacher must also acknowledge that what they are talking  about today is another “model” for tornadoes. Since the air moves in a variety of patterns and directions, the formation of tornadoes is very complicated. So, today’s lesson is just one, simplified way that describes how tornadoes form.  Then, the students will have the opportunity to describe what they have learned in a variety of ways. They can draw a picture of the tornado as a result of the hot and cold air, they can write about it (poem, paragraph, etc.), or they can present a “weather report” to the class in which they pretend they are a weatherman and describe what is occurring during a tornado. The teacher will remind the students of the expectations and give them a specified amount of time to work on their individual projects. She will remind them that they have only talked about a simplified way that tornadoes form, which means that their models can be very different from one another because tornadoes are very different from one another. Their product will be their personal way of showing what they learned about how tornadoes form. After the time has passed, the students who prepared a presentation will give it to the class and the other projects will be displayed in the classroom or hallway. |
| 10 minutes | Summary/Closing:  The students will put away all materials. Students who prepared a presentation will give  their report one by one to the whole class. Any clarifying questions can be answered at this  time by the teacher or student “experts.” All of the projects from the other students will be  posted in the classroom or hallway at this time. |
|  | Student Assessment:  Assessment will be based on the type of project they choose to complete. Their drawing, written explanation, or presentation will be assessed based on their understanding of how and why tornadoes occur. A rubric will be used in order to ensure that they touch on all of the necessary components. |