**Lesson Cycle (Gradual Release of Responsibility)**

**Lesson Title/Topic: Being a meteorologist!**

**Standards: TEKS CP2.9.A**

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| **Lesson Objectives:** Students will research and identify current or emerging occupations with 80% level of proficiency. | **Assessment:** Students will complete a virtual lab and interactive board. |
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**Materials:** 1 laptop, 2 presentation boards, brads, green felt, thermometer, weather wheel template, sandwich bags, cotton balls, black and white paint, paintbrushes, white glitter, blue rice, icicle looking pipe cleaners, decorative marbles, colored pictures of weather, colored pictures of clouds

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| **The teacher will:** | **The student will:** |
| **Focus:** Prior to the students arriving, a presentation board will be set up. The tri-fold board will have answers to the following questions:   1. What does a meteorologist do? 2. Do you need to go to college to be a meteorologist? 3. What is the average salary for a meteorologist? 4. What is one part of weather that meteorologists study? | Explore the board and look at the pictures on the board. |
| **Teacher Input (I Do):**    Read the tri – fold board to the students  Q.1 *What does a meteorologist do?*  *Q. 2 Do you need to go to college to be a meteorologist?*  *Q. 3 What is the average salary for a meteorologist?*  *Q. 4 What is some aspects of weather that meteorologists study?*  *Q. 5 Why do you think meteorology is important to study?* | Students will assist the teacher in lifting the question flaps.    *Study the weather*  *Yes – you need a 4 year degree*  *$87,000/year*  *Atmosphere, air flows and structures, weather observation and forecasting*  *Weather observation and forecasting help people stay weather aware. Forecasts help farmers know when they can expect rain. Forecasts help the community know when they can expect severe weather such as thunderstorms and tornadoes. Weather forecasting can also tell people if there might be snow coming.* |
| **Guided Practice (We Do):**  Divide the students into two groups of 5.  The 2 groups of students will rotate through the centers. Each group will spend 5 minutes at each center.  Center 1 - [meteoearth.com](https://www.channelone.com/extreme-weather-simulator/#/map)  Center 2 - Create your own felt weather board.  Center 3 – Make your own weather bag | Use the mouse and the laptop to simulate weather patterns and see first hand how meteorologists study the patterns.  Make their own weather forecast board.  Each student gets their own piece of green felt. They add 5 velcro circles to the board. They put a red piece of paper in the bottom of the thermometer template. They Velcro the weather forecasting tools and types of weather to their board.  Create weather bags  Clouds – can be all white or can be painted black or grey  Put the clouds in the water bottle  Using a funnel, pour the blue rice(rain) into the zip lock bag.  Combine glitter(snow), icicle pipe cleaners (ice), and glass marbles (hail) |
| **Independent Practice (You Do):**  A template to create a one-page wonder about the field of meteorology will be passed out to the students. | Students will complete a one-page wonder about being a meteorologist. The two questions below must be answered in their one-page wonder:   1. What is the function of a meteorologist? 2. Distinguish what could happen and what couldn’t happen if meteorologists did not exist? |
| **Closure:**   Why is it important for meteorologists to study the weather? (closing question is on the main presentation board)  What do you think would happen if meteorologists did not exist?  How would people be warned about the weather or know what to expect for the day if meteorologists did not exist? | To help people stay safe  To help make sure our food such as crops are going to get enough water and sunlight  To help us keep our animals safe  Hypothesize and discuss different scenarios  Hypothesize and discuss different scenarios |

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| ***Bloom’s Level(s):***  *Ananlysis:*  *“What do you think”*  *“How”*  *“Why is it important”* | ***Technology Integration***  Virtual Lab for students to practice building and studying weather patterns around the planet. |
| ***Extension:***  [***http://www.weatherwizkids.com/career-becoming-meteorologist.htm***](http://www.weatherwizkids.com/career-becoming-meteorologist.htm)  [***https://www.youtube.com/watch?v=qWWx3reC9qA***](https://www.youtube.com/watch?v=qWWx3reC9qA)  [***http://youngmeteorologist.org/about-ymp/kids/***](http://youngmeteorologist.org/about-ymp/kids/) | ***Reteach:***  As a class, we will graph the weather for an entire week. We will study the similarities and differences in the weather. We will analyze what a meteorologist might predict for the following week based on our graph. |

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| **Accommodations / Modifications:**  **ESL Students – A worksheet with background knowledge about the meteorology profession will be provided to ESL students.**  **Gifted/Talented – Students may create a blog discussing the importance of meteorology instead of a one-page wonder.**  **Bilingual – Students can work in partners to complete their assignment.**  **Learning Disability – Students can read their notes about meteorology instead of making a one-page wonder.**  **Speech - Students can write the answers to the final questions instead of answering the questions out loud.** | **References:** |