Grade 3	Science	Week 5
Lesson Title: Collecting Weather Data		
Weekly Learning Targets: Students can collect and compare data concerning weather.		
Next Generation Science Standards **3.ESS2.1 –** Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. **3.ESS2.2 –** Obtain and combine information to describe climates in different regions of the world.		

MONDAY

Daily Learning Target: Students can identify and explain the use of different weather measuring tools.
Learning Tasks: After reviewing the previous week's lessons, the students can finish working on their anemometer. Then, the teacher can ask the students what other tools scientists use to measure weather. After creating a list together, the teacher can practice vocabulary words with the students related to measuring weather. (SM A) The students can then play a vocabulary game using these cards. After that, students can record their own definitions about measuring tools in their science journal. Also, students will create rain gauges (SM B) which they will use to measure the rain data for their area. (SM C) If time doesn't permit for students to create their own, the teacher can have created several or use graduated cylinders. There should be multiple rain gauges for comparison.
Daily Formative Assessment: The teacher can check the students' vocabulary definitions.

TUESDAY

Daily Learning Target: Students can demonstrate how tools are used to measure weather.
Learning Tasks: After reviewing the vocabulary from yesterday's lesson, the teacher can tell the students that today they will be able to demonstrate how different tools are used to measure weather. Students should have already made anemometers. They will use these to measure the wind. Then, they can answer the question on page 266 in the text: Tell how your anemometer works. Possible answers may include: The paper cups catch the wind and turn. The faster the wind blows, the faster they turn. They can take measurements by counting how many times a cup goes around in 10 seconds. As a follow up, the students can measure the wind at different times of day in the same spot over the next few days and see if there is anything they notice. Students can also create a lab report. (SM D)
Daily Formative Assessment: The teacher can give feedback on the students' lab report.

WEDNESDAY

Daily Learning Target: Students can discuss why scientists measure weather.
Learning Tasks: At the start of class, the teacher can propose the question: "Why do scientists measure weather?" After discussing, the class can read page 267 in the book together and answer the questions. Following that, they can review different tools used to measure weather like rain gauge, wind vane, anemometer, and hygrometer on page 268. The students can then identify when they would use the tool and how to use it. Finally, the students can learn how to measure air pressure, what tool to use, and why scientists measure air pressure by reading page 269 and answering the questions. If possible, the teacher can bring in an actual barometer to demonstrate.
Daily Formative Assessment: The teacher can check students work in their book.

THURSDAY

Daily Learning Target: Students can compare weather in different cities by finding and organizing data.
Learning Tasks: Note: This lesson plan was derived from the following lesson plan. (SM E) The teacher can review previous lessons and preview what they are going to do in the upcoming lesson. Students will use the internet to find weather data from one city and compare it to the weather in their own city. Students will collect their data

on the internet (SM F) and then create a bar graph (SM G) to display it. The cities are up to the student or teacher, as well as what data to include. Then, the students can answer questions (SM H) based on their data.
Daily Formative Assessment: The teacher can give feedback on the students' recordings.

FRIDAY

Daily Learning Target: Students can compare daily precipitation data collected by students.
Learning Tasks: Note: This lesson plan was derived from the following lesson plan. (SM I) The teacher can review previous lessons. The teacher can then go over the data that they collected from the rain gauges. The students can then find the precipitation data for their city online and record that information as well. Finally, the students can compare the data in pairs or small groups. (SM J) Finally, the class can review their findings together. If warranted, the class can also discuss and design strategies for improving their rain gauges.
Daily Formative Assessment: The teacher can give feedback on student designs or their evaluation reports.

Grade 3– Science – Week 5	MATERIALS / RESOURCES

pencil, science journal, tools for measuring weather, Google Earth, weather website, stopwatch, barometer

A – Weather Measuring Tools - https://www.teacherspayteachers.com/Product/Weather-Tools-Matching-Game-1136199

B – Creating a Rain Gauge - https://www.education.com/science-fair/article/DIY-rain-gauge/

C – Rain Data Measurement - https://betterlesson.com/lesson/resource/3184691/weather-data-using-student-made-rain-gauges-pdf

D – Science Lab Report - https://www.teacherspayteachers.com/Product/Science-Lab-Report-Sheet-1446257

E – Comparing Two Cities' Weather - https://betterlesson.com/lesson/635997/a-weather-tale-of-two-cities

F – Finding Weather Data - https://betterlesson.com/lesson/resource/3184713/collecting-your-data-on-the-internet-docx

G – Bar Graph Sample - https://betterlesson.com/lesson/resource/3253679/bar-graph-sample-pdf

H – Reflection Page - https://betterlesson.com/lesson/resource/3184712/evaluating-comparing-roselle-to-orlando-docx

I – Comparing Precipitation Data - https://betterlesson.com/lesson/636048/comparing-rain-totals

J – Evaluate Data - https://betterlesson.com/lesson/resource/3184688/evaluate-your-precipitation-data-docx

Additional Resources

Weather Wiz Kids Website - http://www.weatherwizkids.com/

Science Curriculum - http://www.whitetwpsd.org/wtsd/About%20WTSD/Curriculum%20Maps/Science/Science%20Grade%203.pdf

Science Curriculum http://www.lewis.kyschools.us/guides/docs/Elementary/3rd%20Grade/3rd%20grade%20Science/3rd%20grade%20Weather%20unit%20NGSS.pdf

Global Weather View - http://www.meteoearth.com