

Elaborate: Take a Note Teacher Guide

Weather Module

Use this guide to provide students with the opportunity to further develop STEM skills demonstrated in the online Take a Note activity.

This teacher support document can be completed in conjunction with the online Take a Note.

Why STEM skills?

The purpose of the Take a Note activity is to provide students with the opportunity to apply and extend their scientific reasoning, data analysis and processing skills while utilizing formal definitions and explanations. Teaching STEM (Science, Technology, Engineering, Math) skills in the early elementary classroom is often overlooked. Students need to have exposure and practice with problem solving, making and recording accurate observations, and building communication skills. In the Take a Note Activity, students will have the opportunity to read and interpret information in a variety of formats, such as data tables, graphs, pictures, charts, and analogies. Incorporating these skills into a digital format where they are heavily scaffolded makes them more accessible for early learners.

In this activity, students will learn to read a rain gauge, enter the data on a table, and then complete a line graph using the entered data. For reinforcement and review there is an embedded lesson included entitled, "What is a Line Graph?"

Reveal student knowledge and understanding

Use the following questions during the activity to encourage your students to think about what they now know about describing weather conditions. These questions are designed to reveal student knowledge of the concepts. Incorrect responses or misunderstandings should be addressed and corrected at this time.

- Use the following questions while the students are engaged in the activity:
 - What measurement tool do we use to find out how much rain has fallen?
 - How does a rain gauge work?
 - Why is it important to keep a data table of our information?
 - A Line Graph shows us change over time. What was the time frame covered in this investigation? (3 days, Mon.-Wed.)
 - What evidence of rain can we see after a rain shower, even if we do not use a rain gauge?
 - Which day had the MOST rain?
 - How much MORE rain was there on Tuesday than on Monday?
 - How much LESS rain was measured on Monday than on Wednesday?
 - How does the line graph help you compare the numbers?



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Enhancing the skill

Use the hands-on STEM Skill Activity to enhance the skills presented in the online activity. The STEM Skill Activity will provide students with the opportunity to make real life observations to solve problems, discuss those observations with their peers, share their ideas, and finally, summarize their experience. Students experience this through the process of:

- **Do:** Provide students with the opportunity to work with their peers.
- **Discuss:** Encourage students to exchange ideas while within their groups.
- **Communicate:** Help students to share observations and findings with the class.
- **Collaborate:** Provide students with the opportunity to summarize their experience and draw conclusions through a closing activity or discussion.



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