

Clouds and Precipitation Menu

Directions: Take a look at the different ways you can explore the **clouds and precipitation** on the choice board. Choose the ONE activity that you think will best help you show what you've learned and that you will enjoy working on!

Ask and Investigate 	Model It! 	Be a Data Detective 
Come up with a question about clouds or precipitation that you can explore (e.g., "Do different types of clouds bring different amounts of rain?"). Plan a simple way to find out more.	Create a model to show how clouds form. Explain the different parts of your model.	Observe the clouds in the sky over a few days. Record the different types of clouds you see and note if it rains or snows. Share any patterns you observe.
Math Connections! 	Explain It! 	Solve a Problem! 
Use numbers to describe different aspects of precipitation. How do these measurements help us understand precipitation?	Explain in your own words how clouds are formed. Describe the different types of precipitation and how they occur.	Think about a problem related to clouds or precipitation (like too much rain causing floods or not enough rain causing drought). Propose a way to understand or address this problem.
Tell a Story! 	Create a Visual! 	Be the Teacher! 
Write a short story about a water molecule as it becomes part of a cloud and then falls to the Earth as precipitation.	Create a visual that shows the different types of clouds and the kind of weather they might bring.	Explain to someone the different forms of precipitation and how they are different from each other.

Sky High Ideas: Clouds & Precipitation!

Explore the fascinating world of clouds and how rain and snow form with these starting points. Remember, you can always come up with your own amazing projects too!

Ask and Investigate 	Model It! 	Be a Data Detective 
1. Do dark clouds always bring rain? How could you observe this? 2. Does the temperature outside seem to change when clouds cover the sun? How could you check?	1. Use a jar, hot water, and hairspray to model how clouds form through condensation. 2. Draw different shapes of snowflakes and explain why they look different.	1. Keep a cloud journal for a week, drawing and describing the clouds you see each day. 2. Check the weather forecast for the chance of rain and look at the types of clouds predicted. Do they match?
Math Connections! 	Explain It! 	Solve a Problem! 
1. If it rains half an inch per hour, how much rain would fall in three hours? 2. Look up the average snowfall for your area in winter. How does it vary month to month?	1. What are clouds mostly made of? How do they stay up in the sky? 2. What's the difference between rain and snow? Why does one fall as liquid and the other as solid?	1. How do scientists try to make it rain in areas experiencing drought? 2. How can too much heavy rain cause problems like flooding?
Tell a Story! 	Create a Visual! 	Be the Teacher! 
1. Write a story from the perspective of a snowflake falling to the ground. 2. Tell a story about two different types of clouds meeting in the sky.	1. Create a chart showing the different types of clouds (cirrus, cumulus, stratus) and what they look like. 2. Draw a diagram showing how water evaporates, forms clouds, and then falls as precipitation.	1. Explain to someone the difference between rain and drizzle. 2. Show a younger person different pictures of clouds and help them name the types.