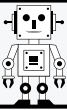
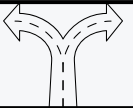


Weather vs. Climate Menu

Directions: Take a look at the different ways you can explore **weather vs. climate** 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 weather, climate, or how water bodies affect them. Plan a simple way to explore your question.	Create a model to show how a large body of water can affect the temperature of nearby land. Explain your model.	Find and compare weather data for a place near a large body of water and a place far away. What patterns do you notice? Share your findings.
Math Connections! 	Explain It! 	Solve a Problem! 
Use numbers to compare weather conditions (like temperature or rainfall) in different locations or over time. How do these numbers help us understand weather and climate?	Explain in your own words the difference between weather and climate. Then, explain how large bodies of water can influence both.	Think about a weather or climate challenge that might be influenced by a lack of or an excess of water. Propose a solution or way to adapt to this challenge.
Tell a Story! 	Create a Visual! 	Be the Teacher! 
Write a short story about a community that lives near a large body of water and how the weather and climate affect their lives.	Create a visual (like a diagram or infographic) that shows how a large body of water can influence the weather and climate of nearby areas.	Explain to someone the difference between weather and climate and how oceans or large lakes can affect both. Use examples in your explanation.

Weather & Climate: Idea Forecast!

Explore the core concepts of weather and climate 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. Does the air near a bowl of ice water feel different than the air in the rest of the room? How could you check? 2. Do different colored surfaces heat up at the same rate in the sun? How might this relate to land and water?	1. Use a lamp as the sun and a container of water and some sand to show how land and water heat up differently. 2. Draw arrows to show how water evaporating from an ocean might affect the air temperature and humidity nearby.	1. Find the average monthly temperatures for a coastal city and a city far inland. What differences do you see? 2. Look at the weather forecast for a few days in a row for a place near a big lake. Do the temperatures change much?
Math Connections! 	Explain It! 	Solve a Problem! 
1. Compare the average rainfall in a desert area versus an area near a rainforest. How many times more rain does one get? 2. If the temperature of the ocean changes by a small amount, how might that affect the temperature of the air above it?	1. What's the main difference between the weather today and the climate of your state? 2. How can a big ocean keep the temperature of the land next to it from getting too hot or too cold?	1. Some places have too much rain and flooding. How might large bodies of water contribute to this? What are some solutions? 2. Other places don't get enough rain. How might the lack of nearby large water bodies make this worse? What are some ways to adapt?
Tell a Story! 	Create a Visual! 	Be the Teacher! 
1. Write a story about a cloud that forms over the ocean and travels over land, bringing rain. 2. Tell a story about two towns, one by the sea and one inland, and how the different weather and climate affect the people who live there.	1. Draw a picture showing how evaporation from the ocean turns into clouds and then rain over land. 2. Create a simple infographic that shows the difference between weather and climate using examples.	1. Explain to someone the difference between a hot, sunny day (weather) and the average temperature in summer (climate). 2. Show someone on a map how places near big oceans often have milder winters. Explain why.