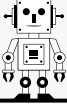
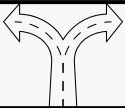


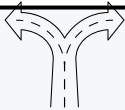
# Predicting Weather Menu

**Directions:** Take a look at the different ways you can explore **weather prediction** 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!

|                                                                                                                                                       |                                                                                                                     |                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ask and Investigate</b>                                           | <b>Model It!</b>                  | <b>Be a Data Detective</b>                                           |
| <p>Come up with a question about how weather is predicted. Plan a simple way to explore your question.</p>                                            | <p>Create a simple model to show how air pressure can affect weather patterns. Explain your model.</p>              | <p>Track a weather forecast for a few days and then compare it to what actually happened. How accurate was the prediction? Share your observations.</p> |
| <b>Math Connections!</b>                                             | <b>Explain It!</b>                | <b>Solve a Problem!</b>                                              |
| <p>Look at weather maps and identify how numbers and symbols are used to represent different weather conditions. Explain what some of these mean.</p> | <p>Explain in your own words some of the tools and technologies that meteorologists use to predict the weather.</p> | <p>Think about a challenge or situation where accurate weather predictions are important. Describe the problem and how weather forecasting helps.</p>   |
| <b>Tell a Story!</b>                                               | <b>Create a Visual!</b>         | <b>Be the Teacher!</b>                                             |
| <p>Write a short story about a meteorologist who has to use different types of weather data to predict a big storm.</p>                               | <p>Create a visual that shows the different tools and data sources used in weather forecasting.</p>                 | <p>Explain to someone how to read a basic weather map (including symbols for temperature, precipitation, and wind).</p>                                 |

# Futurecast: Weather Prediction Ideas!

Explore the science behind predicting the weather with these starting points. Remember, you can always come up with your own amazing projects too!

|                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ask and Investigate</b>                                                                                                                                                           | <b>Model It!</b>                                                                                                                                                                                                       | <b>Be a Data Detective</b>                                                                                                                                                         |
| <ol style="list-style-type: none"> <li>1. Do you notice any patterns in the clouds before it rains in your area?</li> <li>2. Does the wind seem to change direction before a change in weather? How could you track this?</li> </ol>                                  | <ol style="list-style-type: none"> <li>1. Use a barometer app on a phone (with adult supervision) to see how air pressure changes over a few hours. How might this relate to weather?</li> <li>2. Draw a simple diagram showing how warm and cold air masses might interact to create storms.</li> </ol> | <ol style="list-style-type: none"> <li>1. Compare the short-term and long-term weather forecasts for the same day. Are they always the same?</li> <li>2. Track the movement of a weather system (like a storm) on an online weather map over a day or two.</li> </ol> |
| <b>Math Connections!</b>                                                                                                                                                             | <b>Explain It!</b>                                                                                                                                                                                                     | <b>Solve a Problem!</b>                                                                                                                                                            |
| <ol style="list-style-type: none"> <li>1. What do the numbers on a weather map showing air pressure mean?</li> <li>2. How are percentages used to describe the chance of rain in a forecast?</li> </ol>                                                               | <ol style="list-style-type: none"> <li>1. What is a weather front, and how does it help meteorologists make predictions?</li> <li>2. What are some of the tools that are used on weather satellites?</li> </ol>                                                                                          | <p>How does accurate weather prediction help farmers?<br/>How can knowing the weather forecast help people stay safe during severe storms?</p>                                                                                                                        |
| <b>Tell a Story!</b>                                                                                                                                                               | <b>Create a Visual!</b>                                                                                                                                                                                              | <b>Be the Teacher!</b>                                                                                                                                                           |
| <ol style="list-style-type: none"> <li>1. Write a story about a group of scientists trying to predict the weather for a very important event.</li> <li>2. Tell a story from the point of view of a weather balloon collecting data high in the atmosphere.</li> </ol> | <ol style="list-style-type: none"> <li>1. Create a poster showing common weather map symbols and explaining what they represent.</li> <li>2. Draw an infographic that shows the different layers of the atmosphere and where weather occurs.</li> </ol>                                                  | <ol style="list-style-type: none"> <li>1. Show someone how to find the weather forecast for your town online or on TV.</li> <li>2. Explain to a younger person why it's important to listen to weather warnings.</li> </ol>                                           |