



Weather



by Ellen Lawrence

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Let's Investigate Weather

What's the **weather** today? Is it sunny, rainy, or snowy? What's the **temperature**? Is it hot or cold? Paying attention to the weather helps us decide how to prepare for the day. On a hot, sunny day, you might put on shorts and a T-shirt and go to a beach. On a snowy day, you might wear a coat and hat and build a snowman. Inside this book are lots of fun experiments and cool facts about weather. So grab a notebook, and let's start investigating!



Check It Out!

Scientists called **meteorologists** watch and study the weather. They also **forecast** what the weather will be like in the near future. For one week, watch the weather like a meteorologist!

1. In a notebook, draw a weather chart like the one shown. Then put a **thermometer** outside.
2. Check the thermometer at the same time each day for a week. Write the temperatures in your chart.
3. At the end of each day, draw weather symbols to illustrate the weather for that day.

Weather Symbols



Sunny



Cloudy



Rainy



Snowy



Windy

Temperature is measured in degrees. We use the symbol ° to show degrees. This thermometer shows a temperature of 100°F (38°C).



WEATHER CHART

Mon.
70°F
(21°C)



Tues.
64°F
(18°C)



Wed.
72°F
(22°C)



Thurs.
67°F
(19°C)



Fri.
63°F
(17°C)



Sat.

Sun.



How can the sun help you tell time?

Did you know the sun can help you tell time? Before clocks were invented, people used devices called sundials to figure out what time it was. You can make your own sundial and use it on a sunny day. Let's investigate!

You will need:

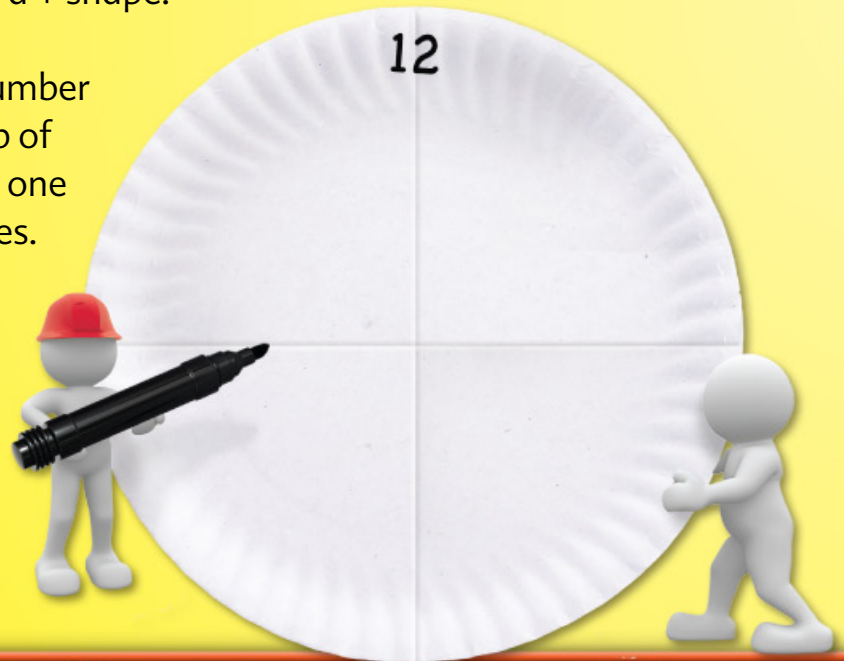
- A paper plate
- A marker or pen
- A pencil
- A watch or small clock
- A notebook and a pencil

1

Fold a paper plate in half, press down on it, and unfold it. Then turn the plate halfway and fold it again to make a crease in the opposite direction. The creases should form a + shape.

2

Write the number 12 at the top of the plate on one of the creases.



3 Push a pencil through the center of the plate, so it's standing straight up.

4 Just before noon on a sunny day, take your sundial and a clock or watch outdoors. Place the sundial in a sunny spot that's flat, with the number 12 facing up. The pencil will cast a shadow on the plate.

At exactly 12:00 P.M., position the sundial so the pencil's shadow is pointing to the number 12.

5 At 1:00 P.M., note where the pencil's shadow is pointing and write a 1 at that spot on the top of the plate. Then at 2:00 P.M., check the shadow and write a 2, and so on.

6 Keep the sundial in the same place. Over the next day or so, in the morning or afternoon, check the sundial every hour and add the remaining numbers of a clock until you have all the numbers, 1 through 12. Now when it's sunny, you can use the sundial to tell time!



- Why do you think the pencil's shadow is moving?
- When wouldn't you be able to use a sundial to tell time?

Write down your ideas in your notebook.

(To learn more about this investigation and find the answers to the questions, see pages 20–21.)

