

# Weather

Watchers

1<sup>st</sup>  
GRADE



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*Certificate of Completion*

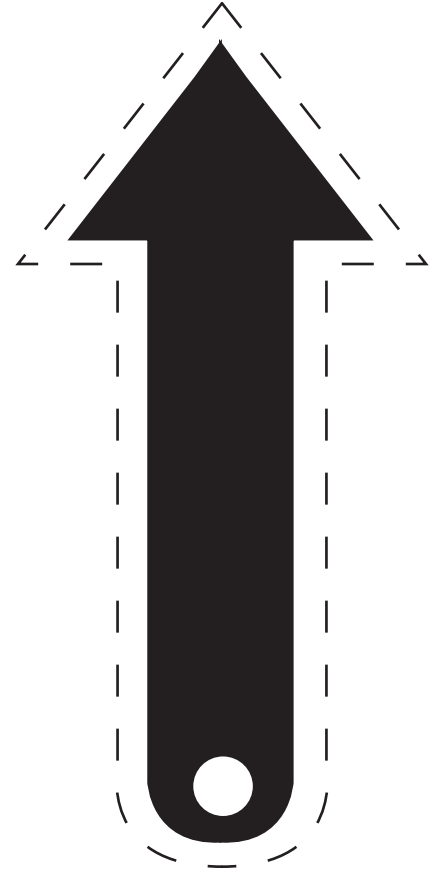
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# Weather Spinner Activity

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## To create your weather spinner:

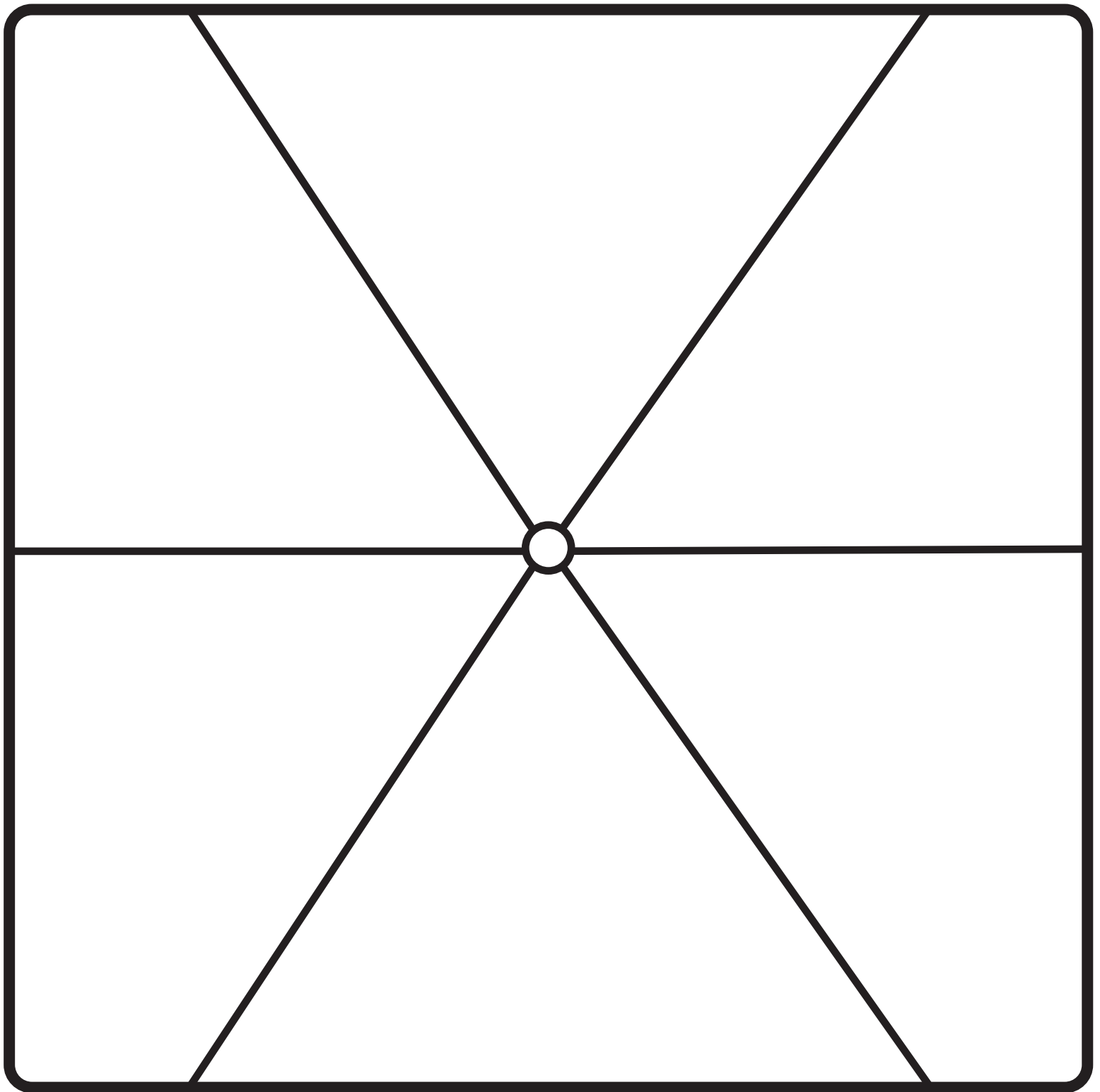
1. Brainstorm descriptive adjectives that describe different types of weather and write them down in the box below.
2. Use your list of weather words to fill in each of the spaces on the board with a different type of weather. Don't forget to draw pictures!
3. Cut out this arrow spinner and the board provided on page 2 of this activity.
4. Line up the hole on the arrow with the middle of the spinner board and puncture a hole through them both, inserting a metal brad loosely enough so that the arrow spins easily.



### Weather Words:

For more on the Weather Spinner Activity, visit:  
<http://www.education.com/activity/article/weather-spinners/>

# Weather Spinner Board



# Weather Forecast



**What was weather like yesterday? What is the weather like today? Can you predict what the weather will look like tomorrow? Use the boxes below to draw what the weather looks like outside.**

**Yesterday**

**Today**

**Tomorrow**

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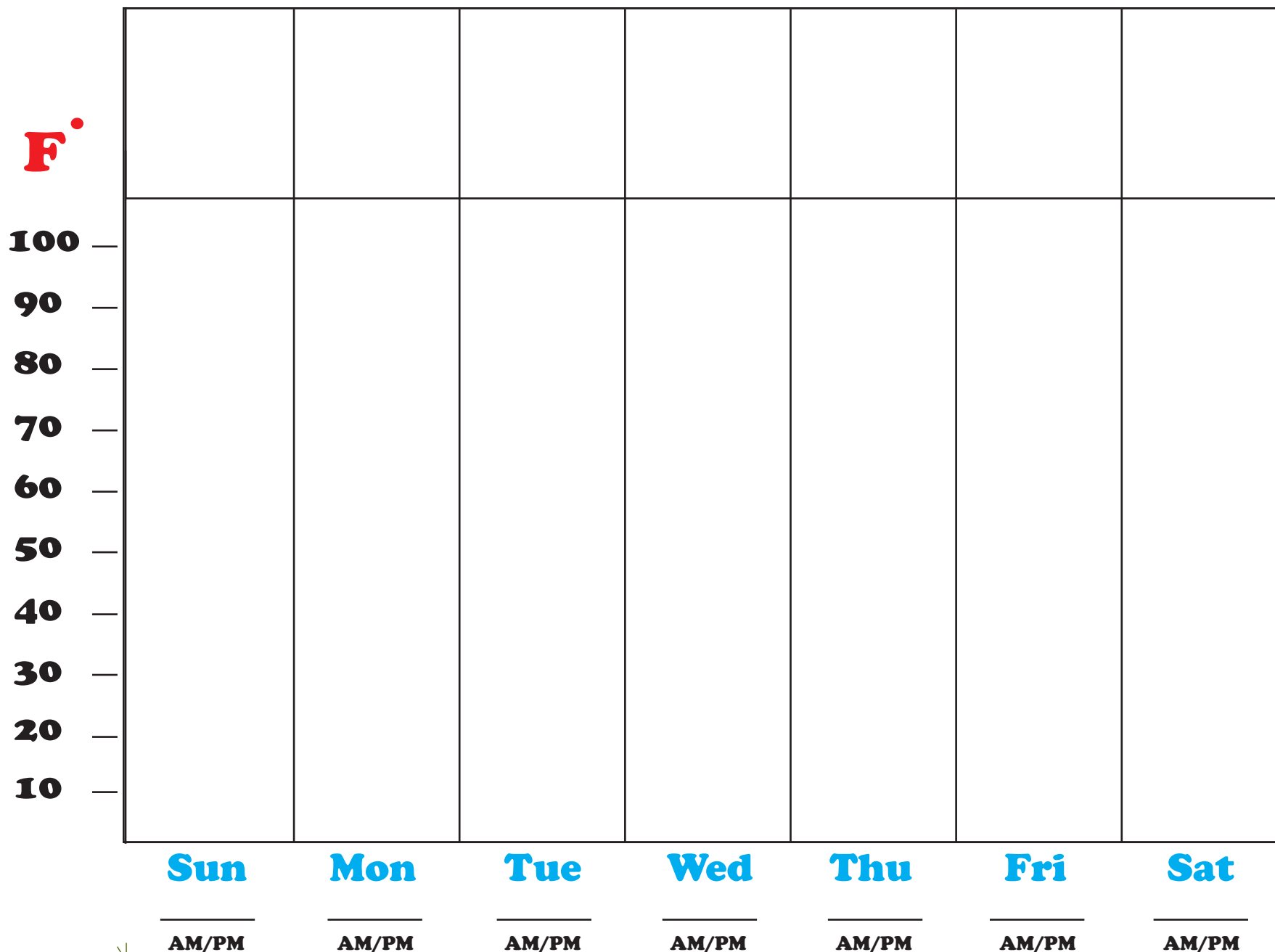
**Explain why the weather will be that way tomorrow.**

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**Weather Log:** Choose a time of day and record the temperature in the bar graph below! Make sure to record the temperature at the same time, every day of the week. Use the space above the graph to draw what the weather looks like that day! Is the weather sunny, rainy, cloudy, or something else?

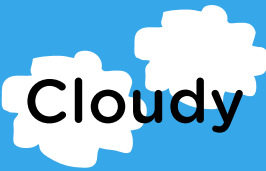







# Graph the Weather!

What's the weather like out there today? Use the chart to keep track of the different weather events outside for a month. Color in a box next to the weather conditions you observe. Answer questions about the weather on the next page. After you are done, answer some questions about the weather.

MONTH: \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
 Cloudy																															
 Sunny																															
 Rainy																															
 Snowy																															
 Windy																															
 Foggy																															

# Graph the Weather!

Now that you have watched and recorded the weather conditions, read your graph to answer some questions about this month's weather!

MONTH: \_\_\_\_\_



How many days were CLOUDY? \_\_\_\_\_

How many days were SUNNY? \_\_\_\_\_

How many days were RAINY? \_\_\_\_\_

How many days were SNOWY? \_\_\_\_\_

How many days were WINDY? \_\_\_\_\_

How many days were FOGGY? \_\_\_\_\_

Which weather condition occurred the most amount of days? \_\_\_\_\_

Which weather condition occurred the least amount of days? \_\_\_\_\_

Were there more SUNNY days or more RAINY days? \_\_\_\_\_

Were there more FOGGY days or more SNOWY days? \_\_\_\_\_

How many more CLOUDY days were there than SUNNY days? \_\_\_\_\_

How many more RAINY days were there than SUNNY days? \_\_\_\_\_

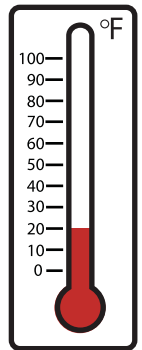
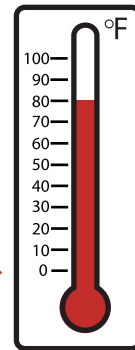
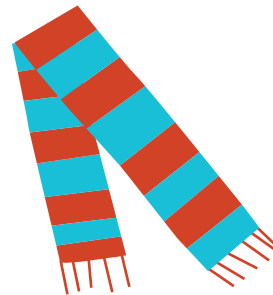
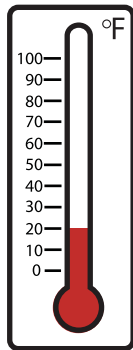
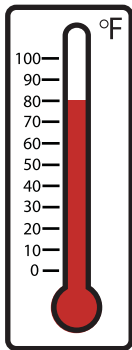
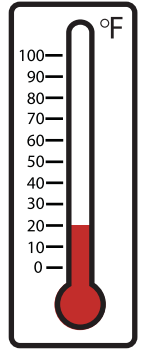
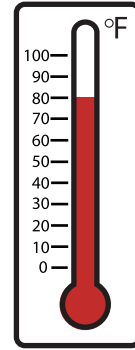
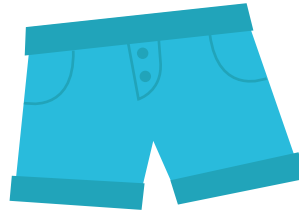
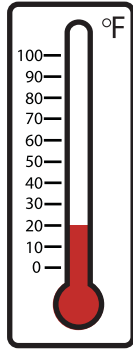
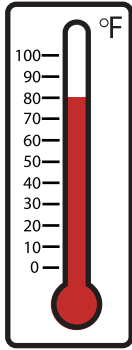
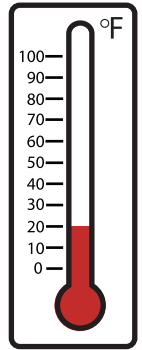
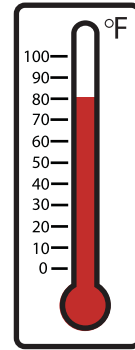
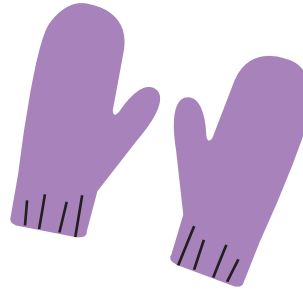
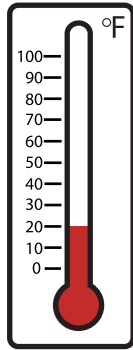
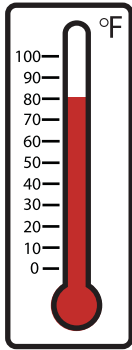
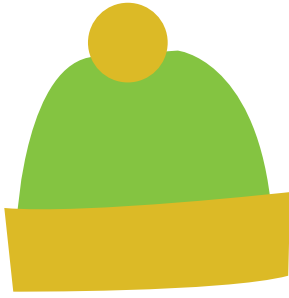
How many more CLOUDY days were there than WINDY days? \_\_\_\_\_

Which weather condition do you predict will occur the most days next month? \_\_\_\_\_



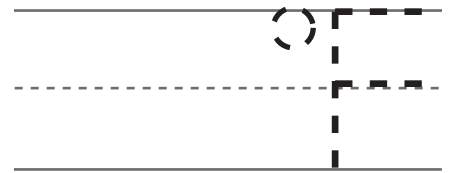
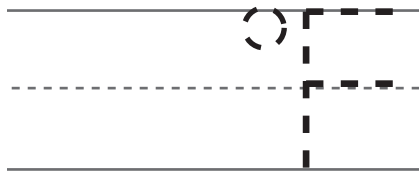
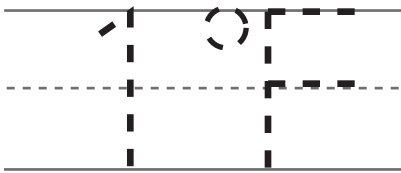
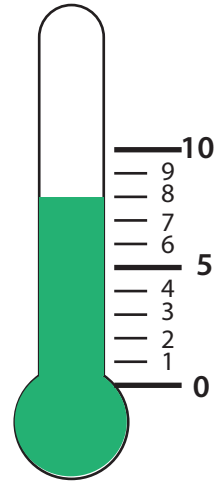
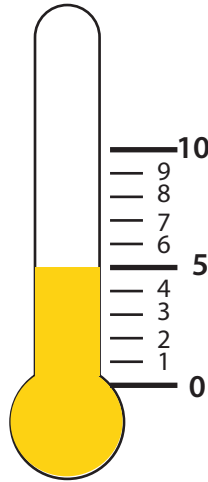
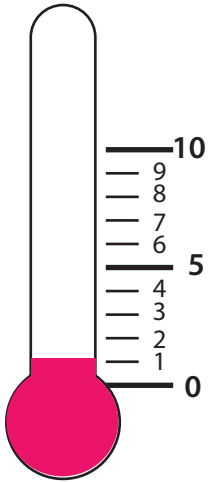
# Hot or Cold?

What should you wear? Circle the thermometer that goes with each item of clothing.

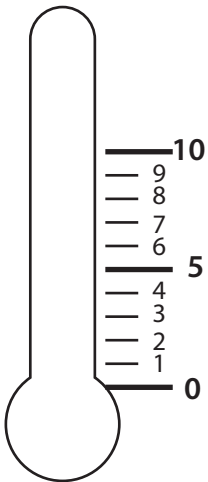


# What's the Temperature?

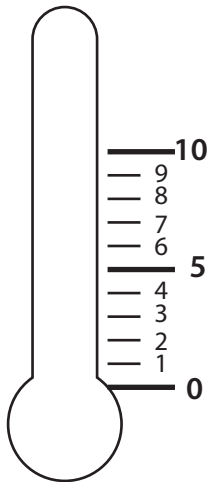
Look at the thermometers and write down the correct temperature.



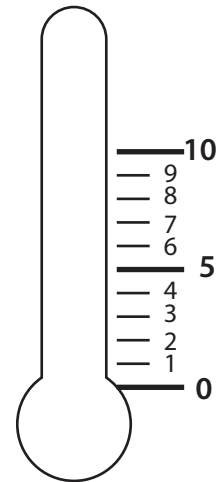
Now color in the thermometer to match the temperature written.



7° F



2° F

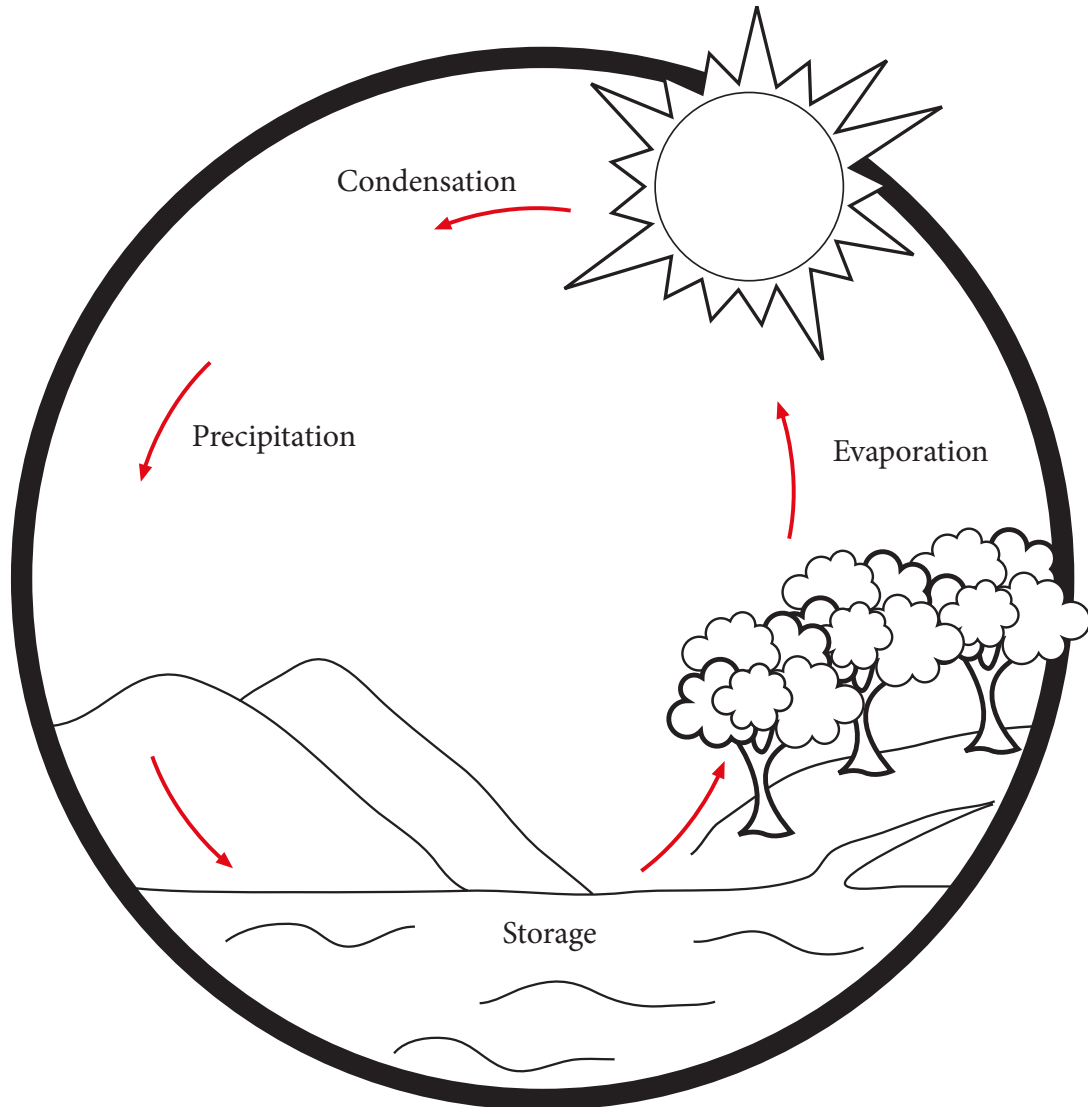


4° F

# Complete the Water Cycle

This water cycle diagram needs some more color!

Read the description of each part of the cycle, then draw a picture of the missing steps.



## Evaporation:

The sun heats the ocean water and turns some of it into vapor.

## Condensation:

The vapor gathers and turns into clouds.

## Precipitation:

Clouds move around in the sky and fall back to earth as fog, rain or snow.

## Storage:

The precipitation is absorbed by the ground or bodies of water.

# Water Cycle Diagram



# Water Cycle Terms

## Directions:

Glue these cut-out labels to the matching spots on the Weather Cycle Diagram that best fit their description!

**Sun**

**Cloud**

**Rain**

**Ocean**

**Evaporation**

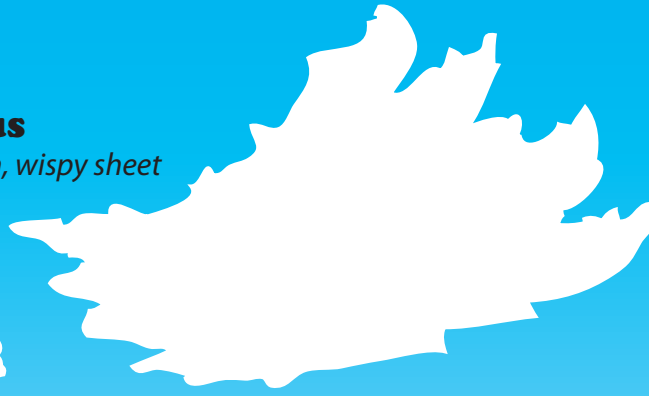
**Condensation**

**Precipitation**

# Types of Clouds

## **Cirrostratus**

*high-altitude, thin, wispy sheet*



## **Cirrus**

*high-altitude, feathery, thin, curly*



## **Cirrocumulus**

*high-altitude, small, patchy, puffy*



## **Cumulus**

*low-altitude, fluffy*



## **Stratus**

*low-altitude, thin, wispy, grey*



## **Nimbus**

*low-altitude, dark, large, dense*





# LABEL THE CLOUDS

**DIRECTIONS:** Label the types of clouds based on the definitions below



**CIRRUS** - High-altitude feathery thin, white, curly shaped clouds.

**CIRROCUMULUS** - High-altitude, small, wispy, patchy puffy clouds that form in rows.

**CIRROSTRATUS** - High-altitude thin wispy clouds. When they cover the sky, they are so thin that it looks like a white sheet.

**CUMULUS** - Low-altitude fluffy white clouds, typical of hot weather

**STRATUS** - Low-altitude horizontal, grey, wispy clouds

**NIMBOSTRATUS** - Low-altitude dark rain clouds



# Snow Facts

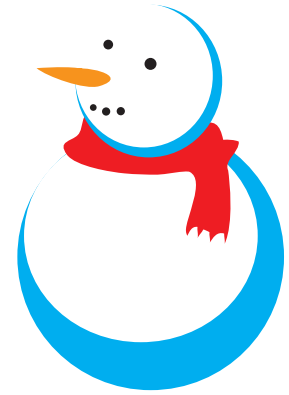


Snow is made when the air in the sky is so cold that it freezes the water droplets in the clouds. Then the water droplets become frozen ice crystals.

As temperatures reach freezing, more and more water will collect on the ice crystal. When it gets too heavy, it falls!

Water comes in three states: solid, liquid and gas. Snow is water in a solid form, rain is water in liquid form, and clouds are water in gas form!

Each ice crystal (or snowflake) has a different shape, depending on the air temperature and how much water vapor there is.



**Each snowflake has a shape entirely its own! Can you draw some unique snowflakes in the box below?**



# Wind Facts

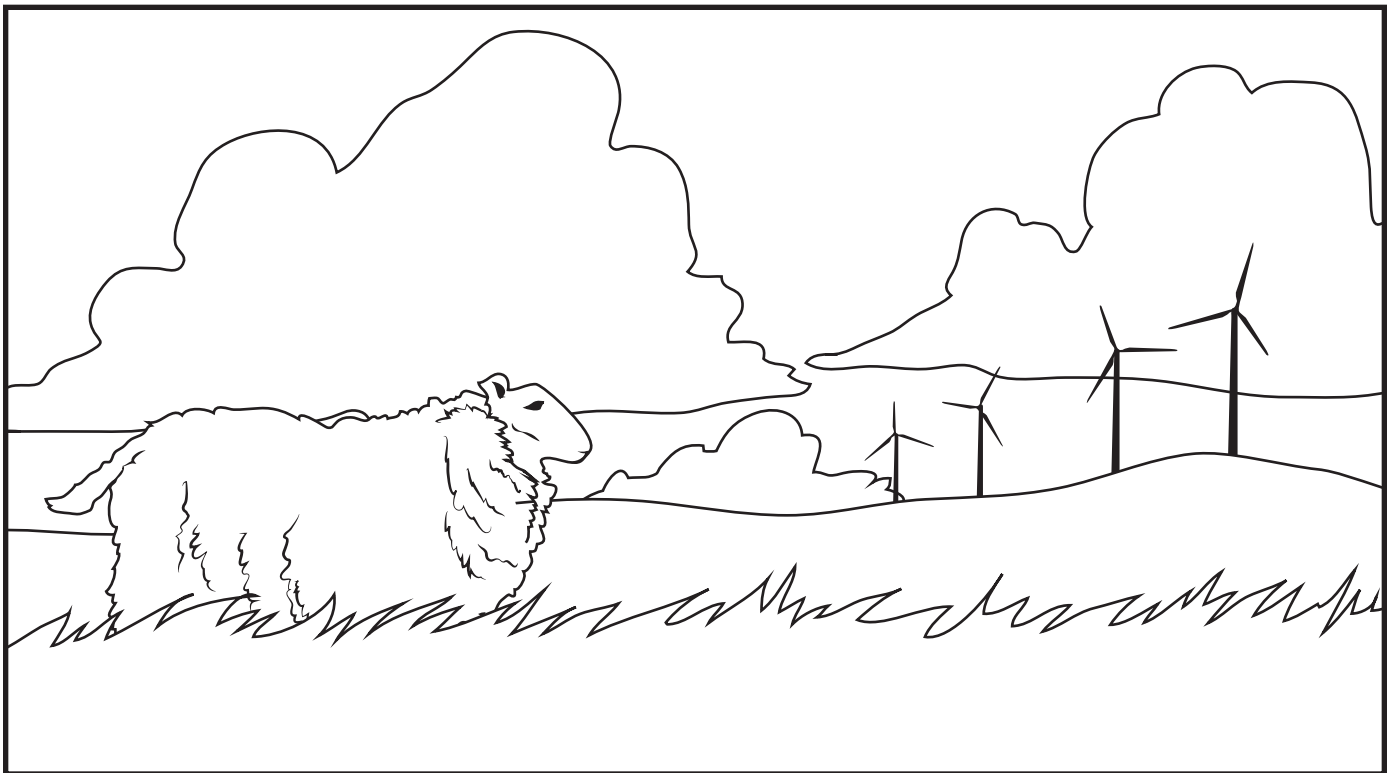
Wind is *moving air*!

It happens because the sun heats up the earth's surface unevenly--high mountains and low valleys absorb the sun's energy differently. The same thing happens in the air. Some parts of the air are colder, and some are warmer.

Warm air weighs less than cold air, so it rises up, and cold air replaces it. Wind happens when the cold and warm air move around in the sky.



**Wind currents have a role in shaping and moving clouds in the sky!  
Can you use the Cloud Shapes Diagram to identify these clouds?**



# Wind at Work

Wind is moving air. We can't see wind, but we can see it move things. Sometimes we can hear it and even feel it!

What can wind do? Fill in the blanks from your own experience!

Wind can blow a \_\_\_\_\_.

Wind can fly a \_\_\_\_\_.

Wind can shake a \_\_\_\_\_.

Wind can make a \_\_\_\_\_ go faster.

I can hear the wind when \_\_\_\_\_.

I can feel the wind when \_\_\_\_\_.



**Draw a picture of a windy day. Show the wind at work!**

# Windsock Project

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## Supplies:

Pages 1 and 2 of this worksheet

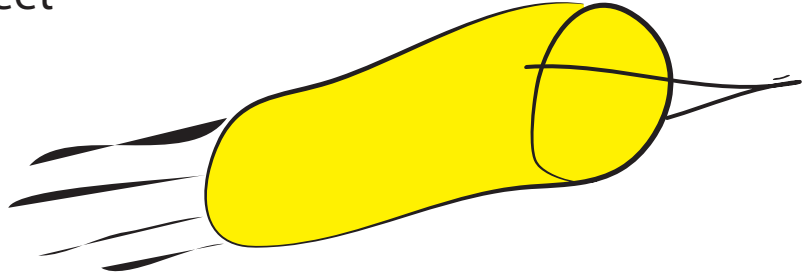
String

Glue or tape

Hole punch

Crayons

Scissors



## Directions:

First, cut out these colorful strips! Then, follow the rest of the directions on page 2 of this activity.

Cut out the strips along the black lines!



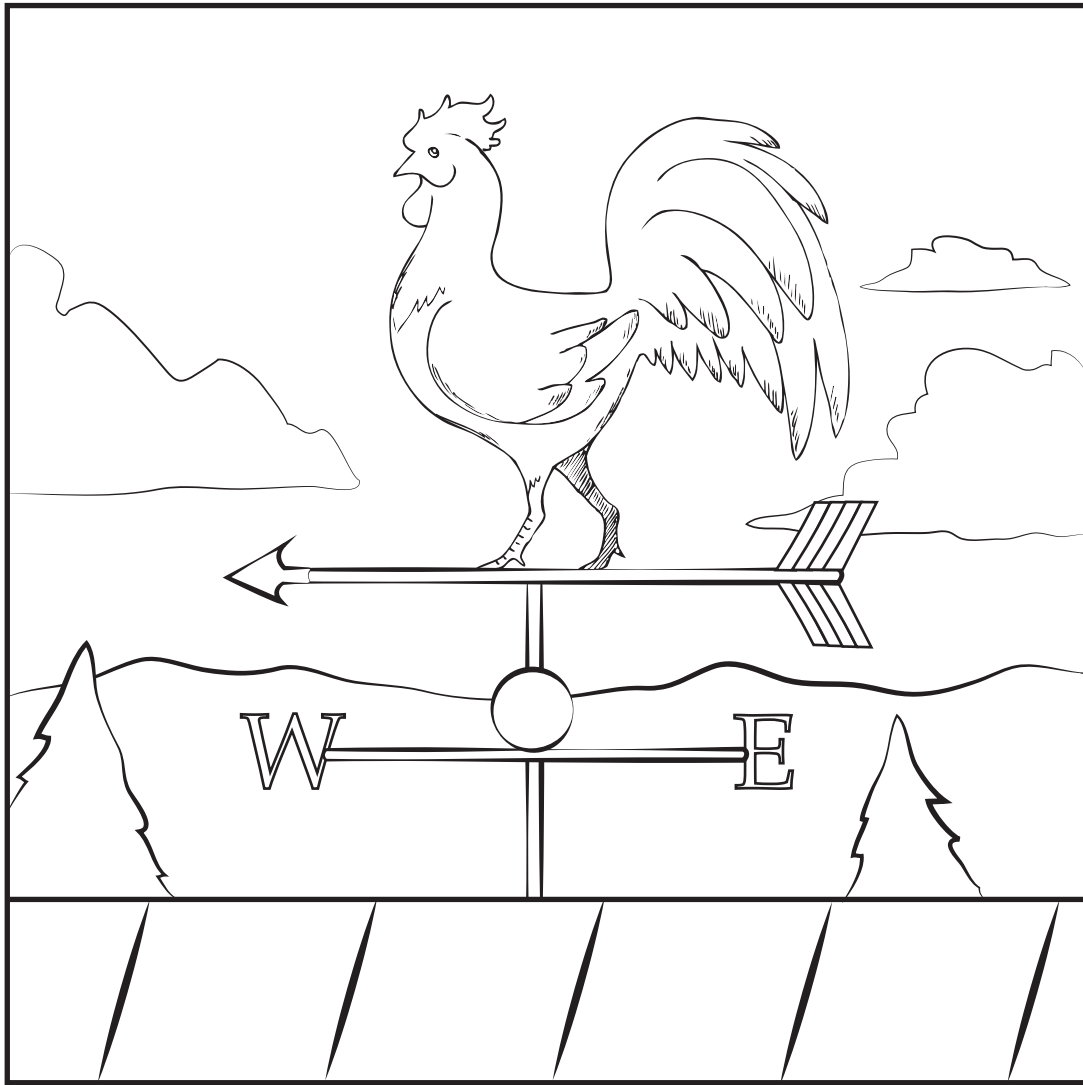


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## How to make a windsock:

1. Flip this page over and decorate the back side of it however you like. **Note: The top edge of this picture (the edge with the red dots) will be the bottom of the windsock.**
2. Cut out the paper strips on page 1.
3. Glue or tape the paper strips onto the red dots on the edge of this page.
4. Once the glue dries, roll your picture hamburger-style until the ends meet. (The strips should be on the inside, your picture on the outside.) Glue, staple, or tape your windsock in the shape of a cylinder.
5. Punch two holes on opposite sides at the top of your wind sock. Thread the string through both holes, pull the ends together, and tie a knot at the top.
6. Hold the wind sock by the knot and take it outside to see which way the wind is blowing!

# Weathervane



A weathervane is one of the most useful tools for forecasting, because certain winds bring certain weather patterns.

If the wind is blowing from the south, the wind is usually warm. If the wind is blowing from the north, the wind is usually cooler.

Weathervanes are usually found on the tops of buildings so they can catch an open breeze. Can you think of some good places to put a weather vane?

Weathervanes can only measure wind direction a few yards off the ground. Large, helium-filled weather balloons (like this one) are used to measure winds high above the earth's surface.

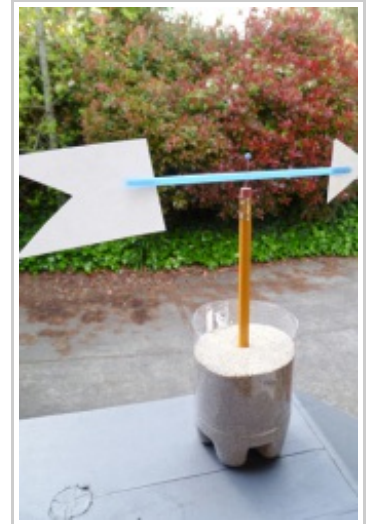


# Forecast the Weather with a Weathervane

Wondering which way the wind blows? Is there a storm brewing? Your child can learn more about Earth Science as well as meteorology through making his own unique weathervane! All that's needed are materials you probably have in the pantry, and items that can be recycled – perfect for an Earth happy project!

## What You Need:

- Old business card
- 1 straw
- Ruler
- Scissors
- Clear tape
- Pencil
- Stickpin
- 1 liter plastic bottle
- Sand
- Compass
- Black permanent marker



## What You Do:

1. Start by researching with your child what a weathervane is and what purpose it serves by visiting your local library or looking online. Many people have decorative weathervanes on their roofs.
2. Help your child gather the materials needed to create his own weathervane. Offer assistance cutting the liter bottle in half if necessary.
3. Now he can cut a triangle out of the business card to create the front and back ends of the weathervane. He can also trim the straw so it is 6-inches long. If the straw has a flexible end, make sure it's the end that is cut.
4. Invite your child to carefully cut slits into both ends of the straw, about  $\frac{1}{2}$  inch deep horizontally, and slid the cut card onto each end. He can secure each of the ends with a small piece of clear tape.
5. Offer your child the pencil and stick pin and encourage him to use the ruler to find the middle of the straw. Now he can position the pencil under the straw and secure the two together with the stickpin creating to top of his weathervane!
6. To create the weathervane base, invite your child to fill the cut bottom of the liter plastic bottle with some sand, and firmly stick the pencil weathervane into the center of the sand.
7. Now your child can place his weathervane in a windy spot and observe how it moves with the wind. Invite your child to guess which direction the wind's blowing, and then use a compass to check his guesses. He can even use a permanent marker to write the directions on the side of the plastic bottle!

# Weather Terminology



## Word Search

A	Y	R	A	I	N	Y	W	H	Z	B	P	A	M	W
P	D	D	J	L	J	Q	A	U	T	A	U	I	R	D
M	N	P	M	C	N	Y	R	H	R	C	L	M	O	P
I	I	N	X	J	S	O	M	T	Y	D	O	Q	B	R
Y	W	S	G	X	D	W	L	U	L	G	D	L	E	E
K	B	H	K	L	D	Y	Q	V	X	T	G	D	D	Q
W	W	X	F	T	C	S	K	Z	V	O	U	O	J	K
Z	K	C	U	L	G	N	I	Z	E	E	R	F	F	F
R	T	Z	O	T	O	H	T	D	J	D	G	W	S	T
S	X	U	J	Q	W	G	F	P	S	V	J	X	P	Y
U	D	A	N	D	F	W	B	U	V	L	H	L	N	D
Y	B	Z	E	U	R	R	R	A	H	Z	G	N	Q	K
C	X	Z	S	I	W	I	H	F	X	K	U	P	Q	S
I	J	G	L	M	Z	I	T	C	S	S	P	V	Q	Z
J	W	R	V	F	O	B	P	N	E	C	C	J	O	F

### Word Bank:

foggy

cloudy

cold

freezing

sunny

windy

warm

mild

rainy

partly cloudy

hot



Great job!

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