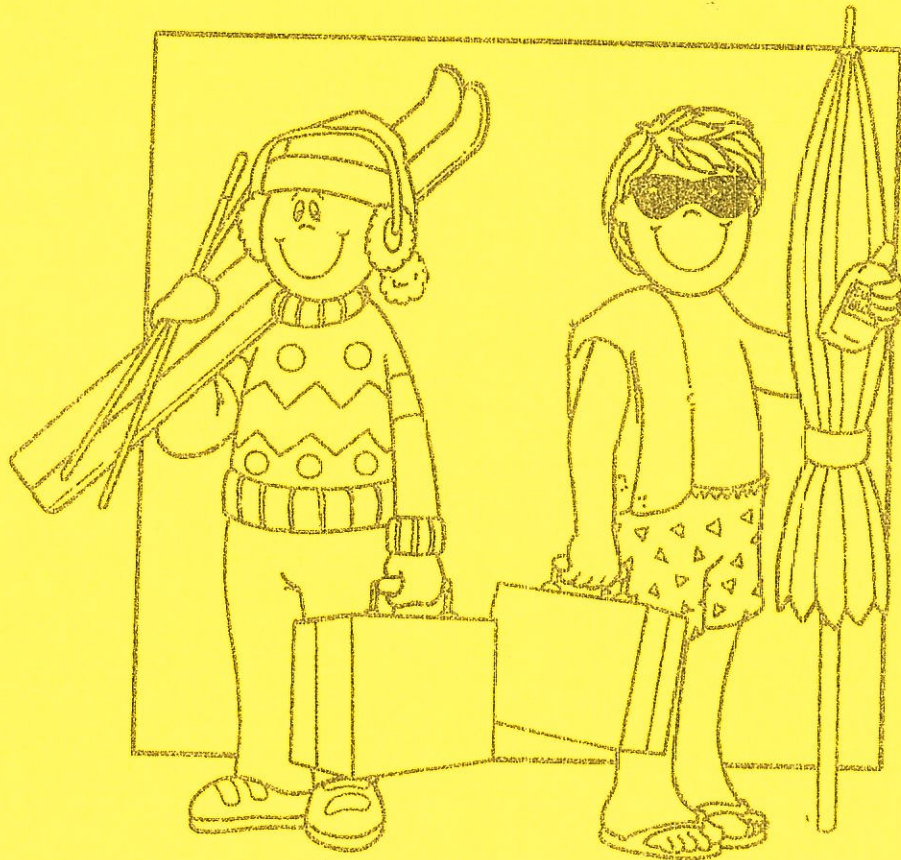
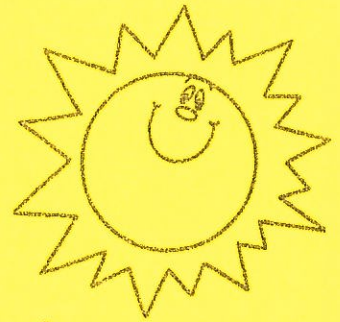


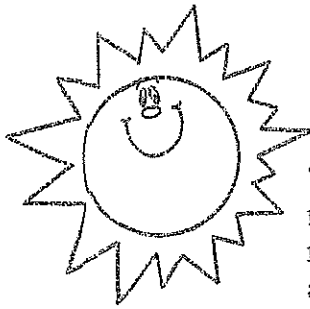
# Mini 4-H WEATHER



WOW! DID YOU KNOW that the earth is completely surrounded by a life-giving ocean of air called the atmosphere? Without the atmosphere there would be no life as we know it on earth. Oxygen that we breathe every minute of every day is found in the atmosphere.

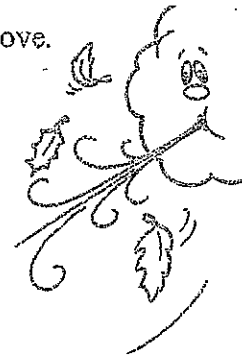
WEATHER is the condition of the lowest layer of atmosphere at a particular time and place. It is the way the air around us constantly changes. Sometimes the air is still. Sometimes there is a soft breeze or a rushing wind. The air can be hot or cold, wet or dry.

Cookies don't taste very good without the right ingredients. Weather also has ingredients to make it work. The main ingredients of weather are sun, wind, and water. Let's learn how these work together!

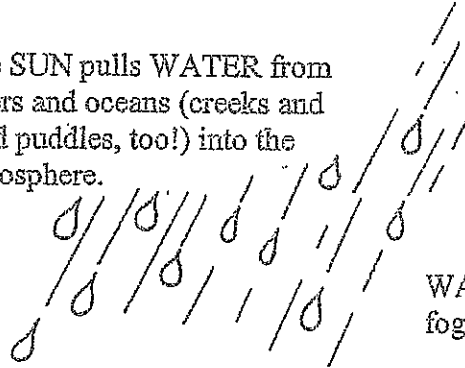


The SUN pulls WATER from rivers and oceans (creeks and mud puddles, too!) into the atmosphere.

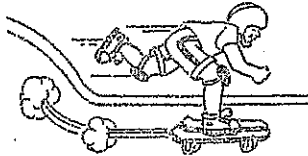
The SUN heats the air and makes it move. When it does this it creates WIND.



WATER in the air helps create clouds, fog, rain, snow, hail, dew, and frost.

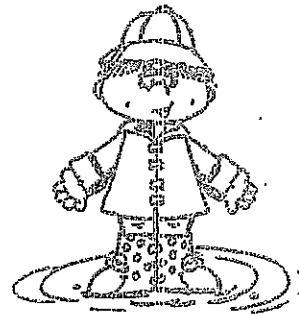


#### WHY DO WE NEED TO KNOW ABOUT WEATHER?



The weather often determines what we will wear each day. Will we need long sleeves or short sleeves, shorts or pants, raincoat or winter coat.

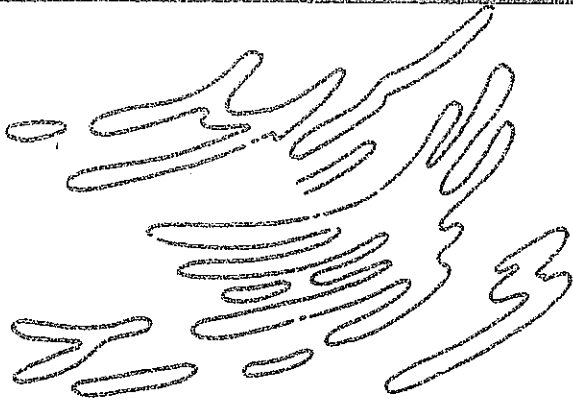
The weather often will determine whether we spend our time inside or outside. Think about what the weather is like on days that you enjoy being outside. What is it like on days that you don't want to play outside?



Now that you know that the WEATHER is a big part of our lives and can be fun to learn about, let's learn more about it!

EXHIBIT: Pick one of the activities and follow the directions. You'll have your exhibit done in a jiffy! If you do Mini 4-H Weather for more than one year, try to pick a different activity each year.

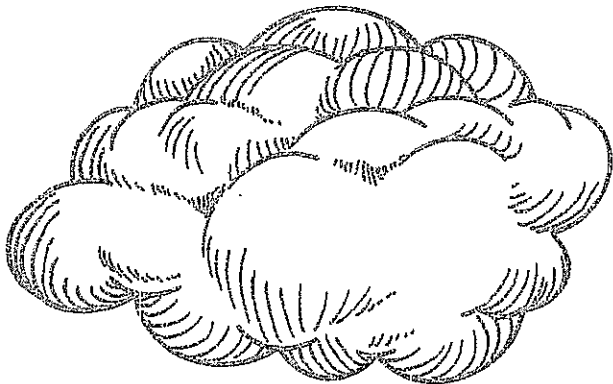
# WEATHER SYMBOLS



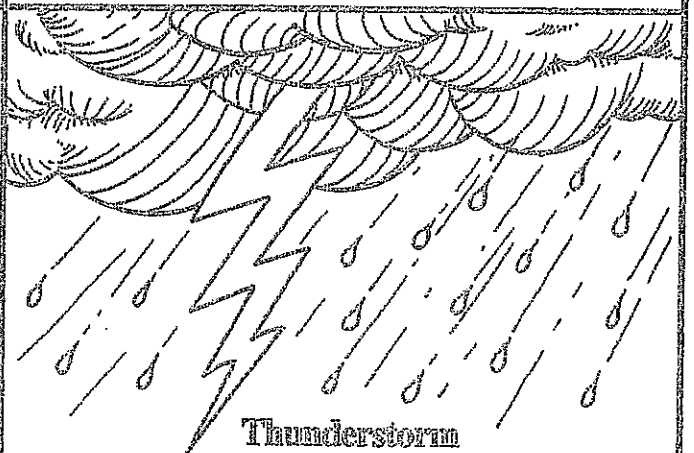
**Cirrus Clouds**  
High, wispy clouds made of ice crystals.



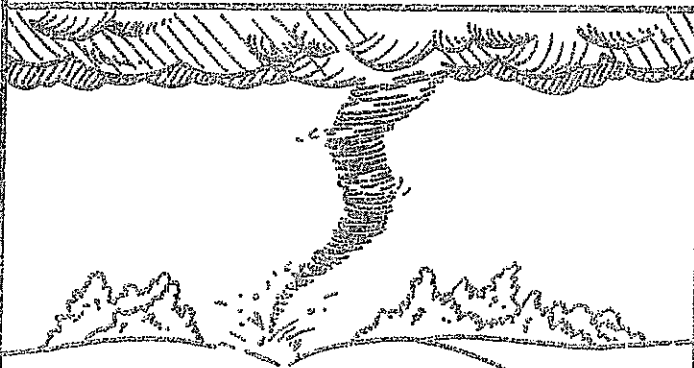
**Stratus Clouds**  
Flat, layered clouds that may blanket the sky.



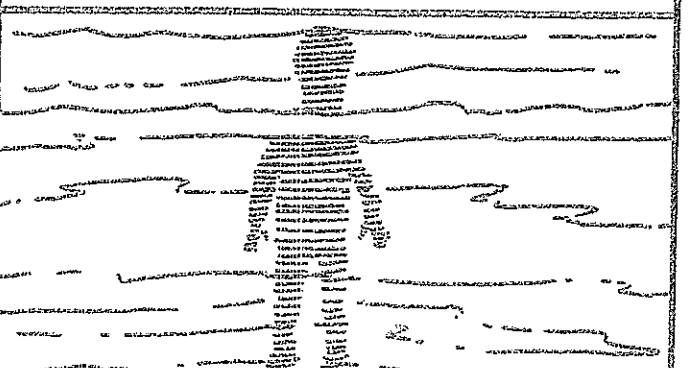
**Nimbus Clouds**  
Dark, rain or snow clouds.



**Thunderstorm**  
Strong winds and heavy rain with thunder and lightning.

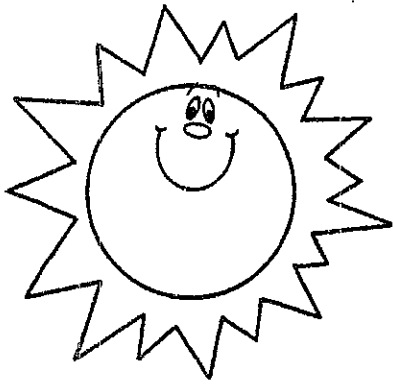


**Hurricane or Tornado**  
A hurricane is a storm with very strong winds. A tornado is a violent wind that often appears as a funnel-shaped cloud.

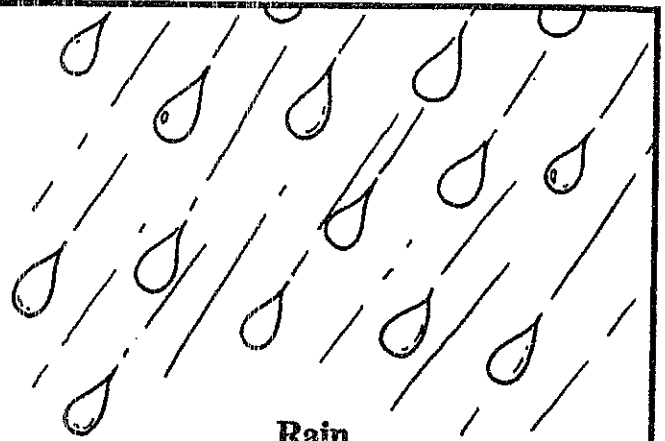


**Fog or Smog**  
Fog is a cloud of tiny drops of water found close to the ground. Smog is a mixture of fog and smoke.

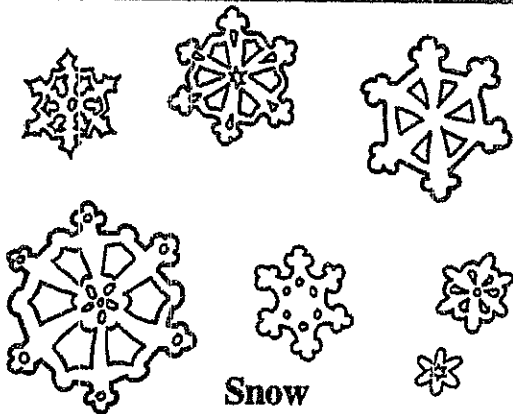
# WEATHER SYMBOLS



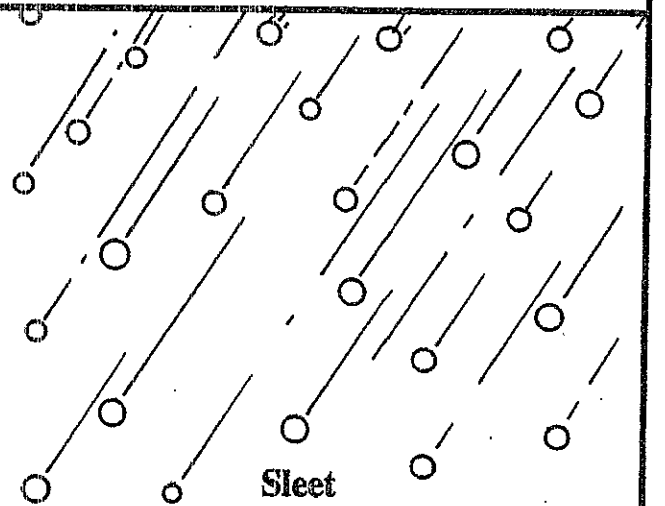
**Sunny**  
Clear sky with sunshine.



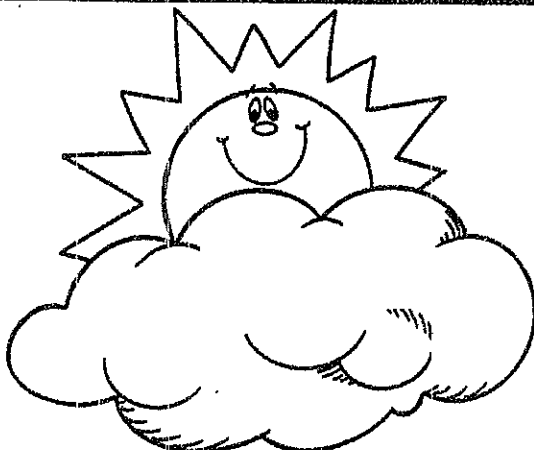
**Rain**  
Water that falls to the earth in drops made from moisture in the air.



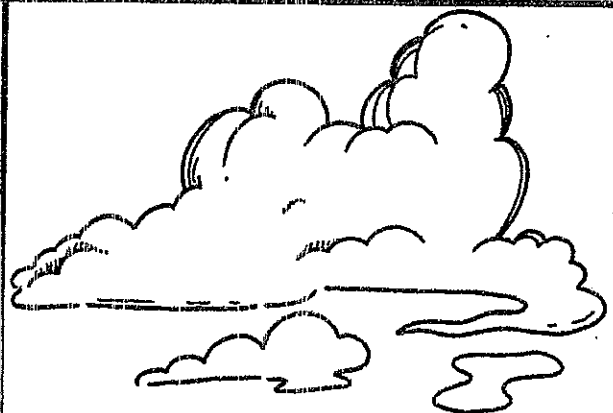
**Snow**  
Small white ice crystals made from drops of water that freeze and fall to earth.



**Sleet**  
Rain that is partly frozen.

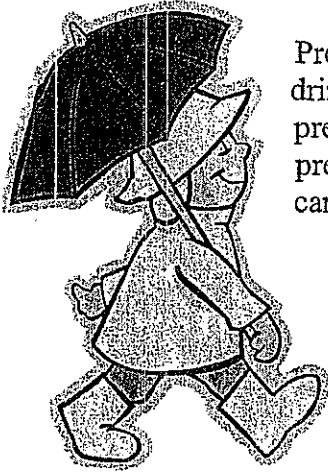


**Partly Cloudy**  
Scattered clouds with no rain or snow.



**Cumulus Clouds**  
Puffy clouds that look like floating cotton; fair-weather clouds.

## ACTIVITY 2: HOW MUCH DID IT RAIN? HOW MUCH DID IT SNOW?



Precipitation is any kind of water that falls from clouds. Rain, drizzle, freezing rain, hail, sleet, and snow are all a form of precipitation. A rain/snow gauge is used to measure the amount of precipitation that falls. Sometimes it rains a lot and sometimes it can go for long periods (weeks even months) with no rain at all.

### WHAT TO DO FOR YOUR EXHIBIT

Supplies: Jar with a wide mouth (big opening at the top)

Masking tape

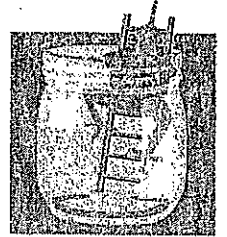
Scissors

Ruler

Pen

Paper and pencils

- Directions:
1. Cut a length of masking tape that will extend from the bottom of your jar to the top of your jar. (Jar should be empty & clean)
  2. Attach the tape to the jar. Make sure it is vertical (up and down) on the jar with the bottom of the tape going all the way to the bottom of the jar.
  3. Smooth the tape. Have your helper help you smooth out any stubborn wrinkles.
  4. Put the ruler against the tape with #1 at the bottom of the jar. Have your helper help you mark  $\frac{1}{4}$  inch,  $\frac{1}{2}$  inch,  $\frac{3}{4}$  inch, 1", and so on. Make the appropriate marks on the masking tape.
  5. Place the rain gauge outside away from buildings and trees.

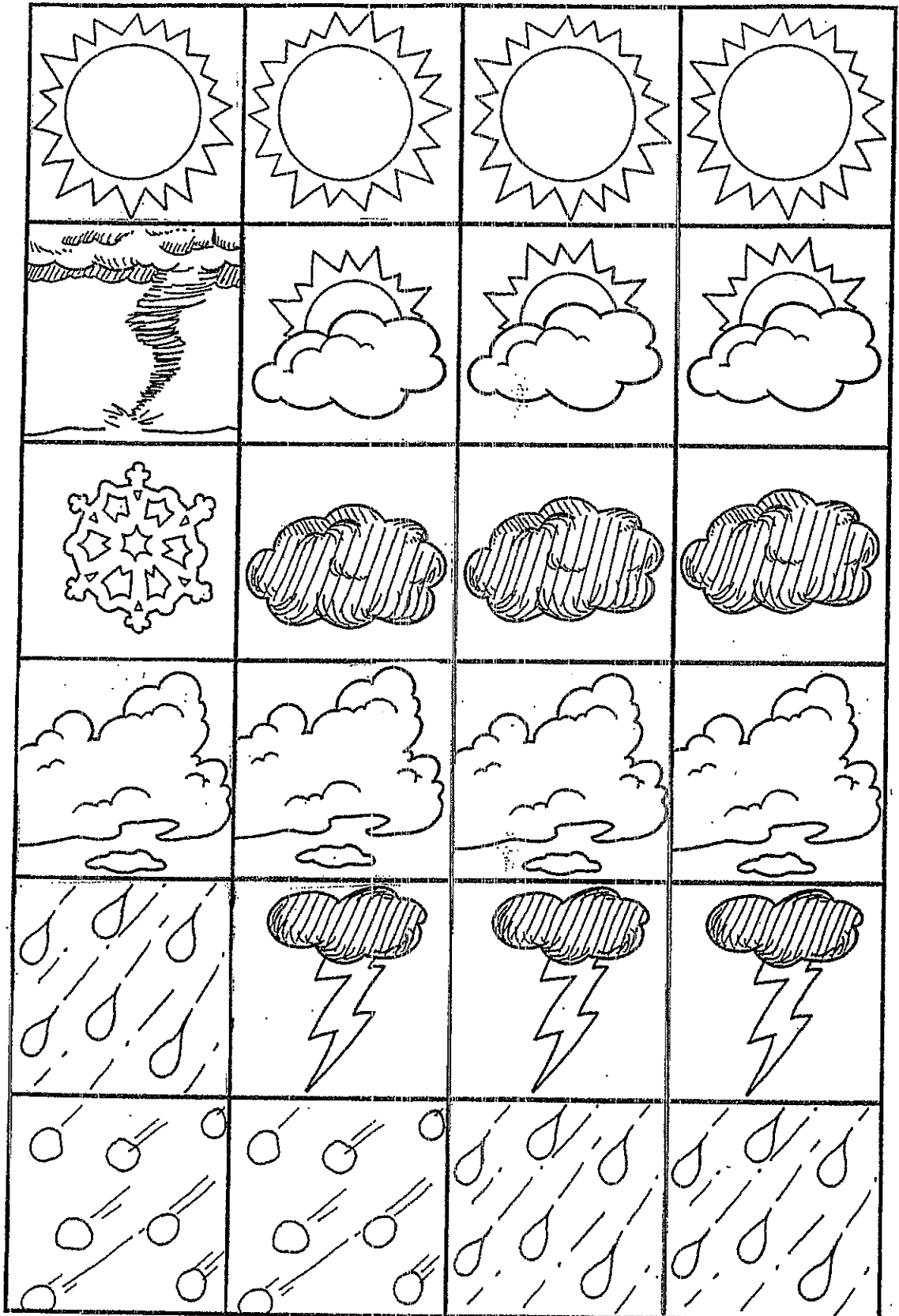


YOU DID A SUPER JOB!!!

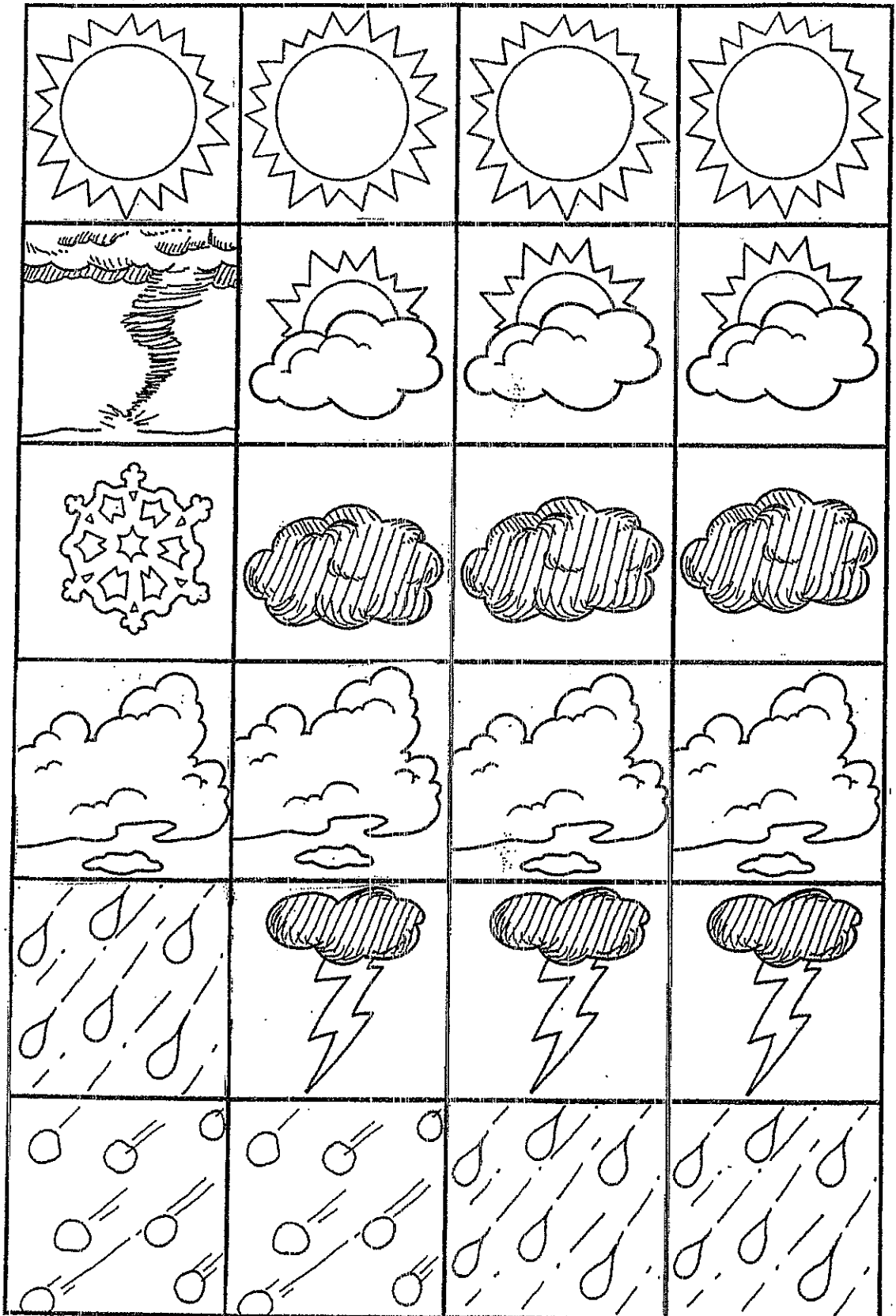
This will help you keep track of the amount of rain you get at your house. If you're measuring snow, ten inches of snow is equivalent to one inch of rain.



# SYMBOLS FOR WEATHER CHART



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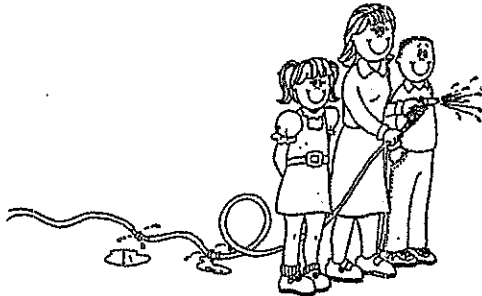
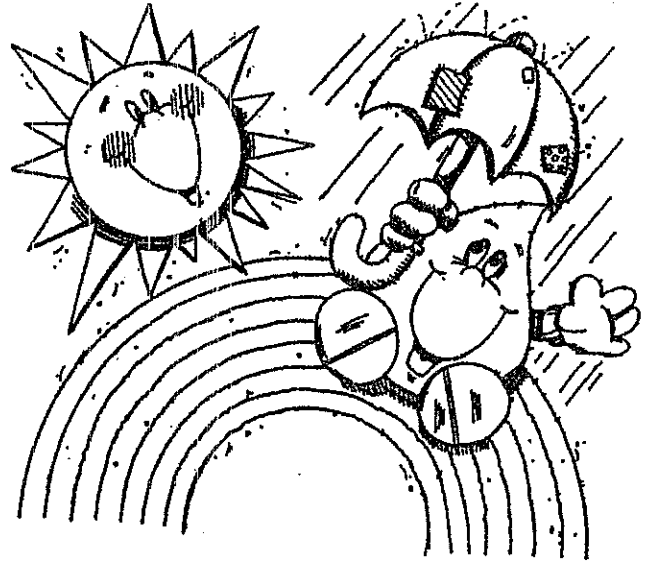






#### ACTIVITY 4: RAINBOW FUN!

Rainbows are one of the most beautiful sights to see! For a rainbow to occur there must be bright sunshine and an unusual amount of moisture in the air. You may see a rainbow when the sun is low and shining on falling raindrops or mist. As the sunlight is reflected by the moisture in the air, the sunlight is broken up into all its colors. If you've seen several rainbows, you may have noticed that the colors in a rainbow always occur in the same order. The outer curve is red followed by orange, yellow, green, blue, indigo, and violet is at the bottom.



Make your own rainbow! Go outside on a sunny day and stand with your back to the sun. Have your helper spray a fine mist of water from a garden hose. Look for the rainbow in the water. Isn't that neat?!

Make a rainbow inside! Place a glass of water (be sure the glass is clear) in front of a window so that it will get direct sunlight. A rainbow will be produced by the light passing through the water and will be cast on the floor. Pretty cool, huh?

#### WHAT TO DO FOR YOUR EXHIBIT: Rainbow Mobile

Supplies: Rainbow pages (2)

Scissors

Crayons

Yarn

Glue

Hole Punch or pointed scissors

Blank pages

- Directions:
1. Color the rainbow bands the correct color. (If your crayon box does not include indigo, then use blue AND violet to make the indigo band of the rainbow.)
  2. Great job! Now cut out both of the rainbows.
  3. Find the two blank pages in this manual that kind of feel like cardboard. On one of these pages, draw 6 simple shapes (stars, hearts, circles, etc.) and color them in the rainbow colors. You could color each one like a rainbow or color each one a solid color. It is up to you.
  4. Cut out your shapes.
  5. Lay each shape down on the other piece of cardstock and trace around it.
  6. Color your second set of shapes.