

THE WAY OF THE WIND

Long ago, farmers and sailors learned that winds coming from different directions caused a shift in weather. For example, north winds generally bring cooler weather, while south winds bring warmer weather. A weather vane is a tool that helps you find the direction of the wind; it spins and points in the direction the wind is coming from. Build your own **weather vane** to help observe the changing winds.

Skills

NOTICING
REASONING
TINKERING

Materials

SCISSORS
RULER
DRINKING STRAW
2 THICK LEAVES
OR A THICK PIECE
OF PAPER (LIKE
CARD STOCK OR
A NOTE CARD)
STICK, AT LEAST
12 INCHES LONG
SEWING PIN
COMPASS (OPTIONAL)

- 1 Press the end of the straw together and cut a $\frac{1}{8}$ -inch slit into the top and bottom ends. (If you drew a line from one slit to the other, it would be a straight line.)
- 2 Cut a triangle and a square from thick paper or leaves. Your triangle should be about $1\frac{1}{2}$ inches on each side, and your square should be 2 inches. Insert the triangle into the slits on one end of the straw, pointing outward, and the square in the slits on the other end, to make an arrow.
- 3 Center your straw horizontally on top of the stick and pin it in place with your pin. The pin should be tight enough to stay in place, but loose enough to allow the straw to spin freely.
- 4 Head outside and observe the weather. Can you feel the wind blowing? What direction do you think it is coming from?
- 5 Decide on a place for your weather vane. It will work best in an open space away from buildings and trees.

6 Push your stick into the ground. This will be easiest on a day when the ground is wet and soft.

7 Spend a few minutes watching your weather vane. You can use a compass to determine which direction the wind is blowing. If you don't have a compass, remember: The sun rises in the east, and sets in the west. If your arrow is pointing in the direction where the sun sets, then the wind is coming from the west and blowing east. Check your weather vane throughout the day and see if it changes!

TRY THIS AT HOME

Create a homemade flag to fly in the wind. Cut three or more rectangular strips of fabric, ribbon, crepe paper, or plastic grocery bags. Each strip should be about an arm's length and 3 inches wide. Tie one end of each strip to a stick. Tie the first strip toward the top of the stick and the remaining strips about an inch apart. Fly your flag outside on a windy day.

