

Weathervanes:

Using the Wind to Predict Weather

Experience one of the earliest forms of folk art as we design and create a weathervane inspired by the Cow weathervane in the *Color, Pattern, Whimsy & Scale* online exhibition.

Rationale

Predicting the weather is a combination of understanding sun, moon, wind, and seasonal patterns. Learning how to create a weathervane to demonstrate the direction of the wind allows us to begin to think about seasonal change and the ways the wind effects weather patterns.

Goals

- Students will learn about the use of a weathervane
- Students will make their own weathervane or pinwheel using recycled materials

National Core Art Standards

VA:Cr1.2.1a - Use observation and investigation in preparation for making a work of art.

VA:Pr4.1.PKa - Identify reasons for saving and displaying objects, artifacts, and artwork

VA:Pr6.1.Ka - Explain what an art museum is and distinguish how an art museum is different from other buildings

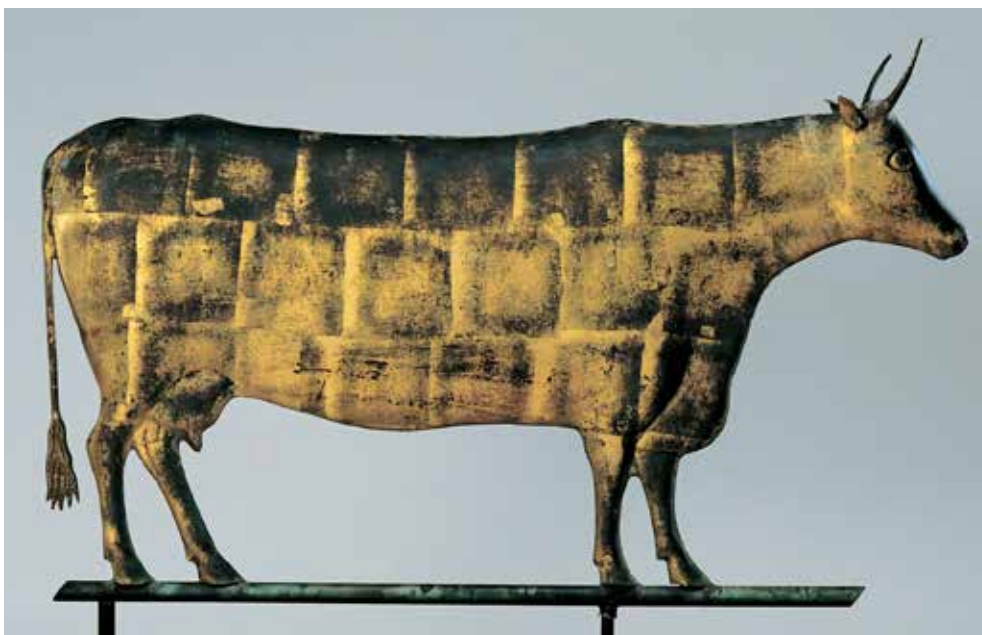
Next Generation Science Standards

ESS2.D: Weather and Climate

Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next.

ESS2.D: Weather and Climate

Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time.



L.W. Cushing and Sons
(Waltham, Massachusetts, active 1867–1933)
Cow, 1875 85
Copper and gold leaf, 17 x 28 in.
Bequest of Harry T. Peters, Jr., 1982 5.413

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Background Information

What is a Weathervane?

- A weathervane, wind vane, or weathercock is an instrument for showing the direction of the wind. It is typically used as an architectural ornament to the highest point of a building. The word vane comes from the Old English word fana meaning “flag”.
- Although partly functional, weathervanes are generally decorative, often featuring the traditional rooster design with letters indicating the points of the compass. Other common symbols include ships, arrows, and horses. Not all weathervanes have pointers. When the wind is sufficiently strong, the head of the arrow, rooster, or other figure, will indicate the direction from which the wind is blowing.
- The weathervane was independently invented in ancient China around the 2nd century B.C.E and in Greece around 48 B.C.
- Weathervanes are one of the first meteorological instruments devised to predict changes in weather based on wind direction
- Weathervanes have been used for many years to decorate rooftops and point to the wind direction.
- Museum founder, Electra Havemeyer Webb, was one of America’s earliest and most prolific collectors of weathervanes. The Museum owns 130 weathervanes.



Weathervanes – Local Connections

Weather plays a crucial role in the life of a Vermont farmer. *The Old Farmer’s Almanac*, as well as other more regional almanacs, has chronicled the daily prediction of weather patterns since the early 19th century. Vermont’s first farmers recorded the weather daily in their journals. The detailed accounts of weather patterns over the days, months, and years were important to keep track of the planting and harvesting cycles of farming. One early frost could ruin that year’s crops and threaten the farmer’s survival. The importance of weather is not only demonstrated in the numerous journals kept by farmers, but also in the folk art discipline of weathervanes and whirligigs. Weathervane and whirligig manufacturing grew out of the farmer’s need to record correct climate conditions. Over time, diverse styles, symbols, and techniques developed. Some symbols, such as the rooster, are common subjects for weathervanes. Other subjects, such as the Centaur weathervane we have in our collection, are unique. The weathervane folk art tradition is a significant record of the impact weather had on farmers throughout the 19th century. Although technology has improved beyond weathervanes and whirligigs, tracking and understanding weather patterns is still important to farmers today. *The Old Farmer’s Almanac* is still published yearly. Individual farmers may not need to be so careful in recording the weather themselves since they have the use of meteorology, widespread publications, and 24 hour televised weather channels. Instead, some of the focus has shifted to a global perspective and how the weather and climate change affects populations worldwide. Weathervanes and whirligigs may not be as useful as they once were, but the weather still has great impact on our daily lives.

Attributed to A. L. Jewell & Co., *Centaur*, 1852–1867. Cut and stamped copper sheet with metal, 38 x 32 x 2 1/2 in. Museum purchase, 1950, acquired from Edith Halpert, The Downtown Gallery. 1961-1.231.

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ACTIVITY!

We will be using common household materials to create a weathervane. You can create a simple or a complex weathervane but, keep in mind, you want the design to be sturdy as it will be facing into the wind.

Materials

- Scissors
- Paper
- Stapler
- Thin straw
- Thick straw
(if you don't have straws, you can use paper towel rolls or toilet paper rolls.) One tube should have a smaller diameter and be able to fit inside the other. Both tubes or straws should be the same length.
- Pencil

Step 1

1. Trace or draw a shape onto paper leaving a 1/4 inch stabilizer tab at the center bottom of your design to place into the small straw or tube.
2. Cut out shape, place to the side.
3. Take your larger tube, staple the bottom closed about a 1/2 inch up from the base.
5. Now, taking your cut shape, fit the stabilizer tab into the smaller straw or tube.
6. Place the smaller straw into the larger straw or tube—done!

Step 2

Take it outside and see if you can determine from which direction the wind is blowing!

