

# What is this?

# What is its function?



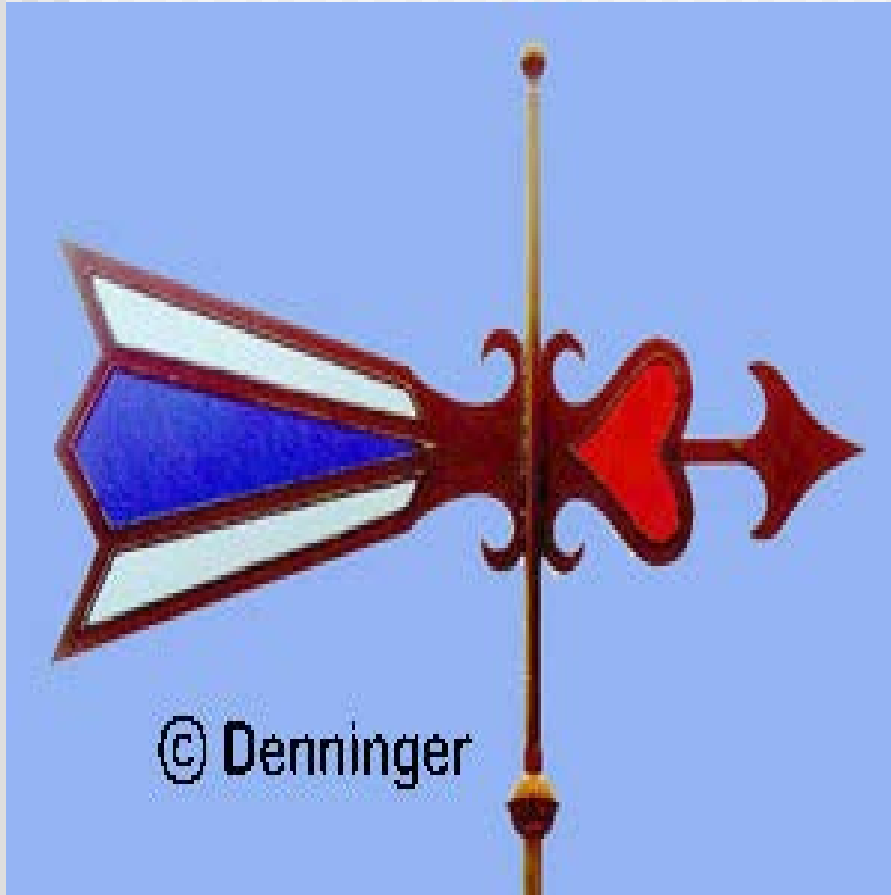
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# Your Thoughts

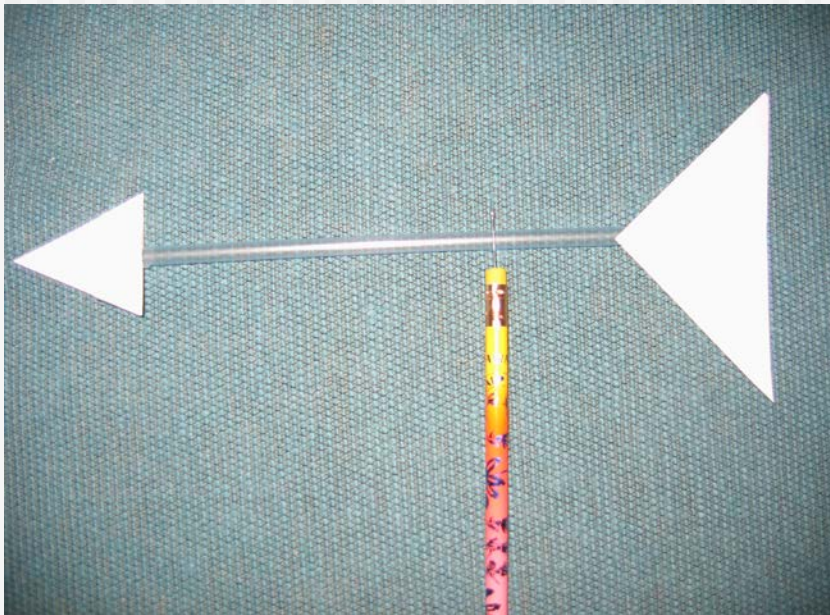
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What affects a wind vane's "vanability" (its ability to work properly)?

# Constructing and Testing

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1. Construct wind vanes of different designs.
2. Record design information and prediction in data table.
3. Test wind vane designs using blow dryer.
4. Describe the performance of your wind vanes in data table.
5. Write rule regarding wind vane design.

# Developing Rules About Wind Vane Design

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Compare your rule with rules written by other pairs.

- What do your rules say about the area of the wind vane?
- What do your rules say about the mass of the wind vane?

What modification are you willing to make to your rule based on the rules written by others?

# Putting Your Understandings of Wind Vanes to the Test!



- Explain the design and operation of the wind vanes pictured here.
- How can a wind vane be useful in predicting the weather?

# Taking Stock of This Task

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## 1. GPS

Co-Requisites: Characteristics of Science (S6CS1, S6CS4, S6CS9) & Science Content (S6E4)

## 2. Enduring Understanding

Weather can be described by measurable quantities, such as temperature, wind speed and direction, and precipitation. (NSES, p. 134)

*Winds are caused by unequal heating and cooling of the earth's surface.*

*Weather changes from day to day and over the seasons.*

## 3. Inquiry

Engagement, Exploration, Explanation, Elaboration, & Evaluation (BSCS 5E Model, teaching science as inquiry)

## 4. Assessment

Formative, Alternative to Multiple Choice, and Individualized