

HOMEMADE WEATHER VANE

('Ohana Engagement)

This lesson plan includes fun and developmentally appropriate activities for your keiki and 'ohana. We've put together a wide variety of activities that will help you learn about wayfinding.

'OHANA GOAL - FAMILY GOAL

(Why do the activity?)

Build and create a weather vane with your 'ohana. Practice and hone the skills of kilo (observation) while adding tools to use in your 'ohana weather observations.

LEARNING OBJECTIVES

Build and create a weather vane together.



HA'AWINA - LESSON

A **weather vane** is one of the simplest weather instruments. It can help us to tell which direction the wind is blowing.

Just as we can see clouds we can also feel the wind. We can use these weather phenomenon to tell us about what is going on in our environment and even help us to prepare for the day and upcoming week. This activity is intended to help exercise our tactile skills of building and practice utilizing **kilo** (observation) skills.



ACTIVITY IDEA

BUILD YOUR OWN WEATHER VANE

Follow these instructions to build a basic weather vane. We encourage you to get creative and add your own touches! Use materials you have around the house.

Materials Needed:

- A Marker or Pencil.
- A Small Round Plastic Container with a Lid.
- Cutting tool (i.e. scissors, x-acto, small knife, box cutter).
- A Few Pieces of Cardstock (a business card, postcard or old greeting card will work).
- An unsharpened Pencil with a New Eraser.
- Play dough, Putty, or Rocks.
- A Disposable Straw.
- A Pin.
- A Compass or your kilo (observation) skills.

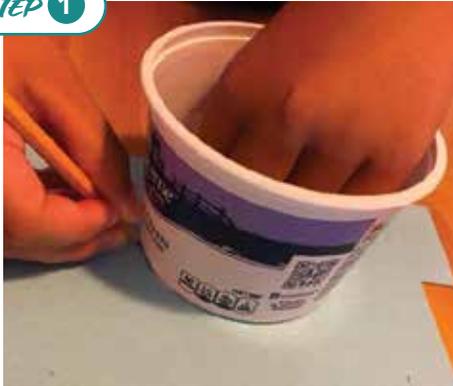


BUILD YOUR WEATHER VANE!

PART ONE

Start with the cardinal direction guide:

STEP 1



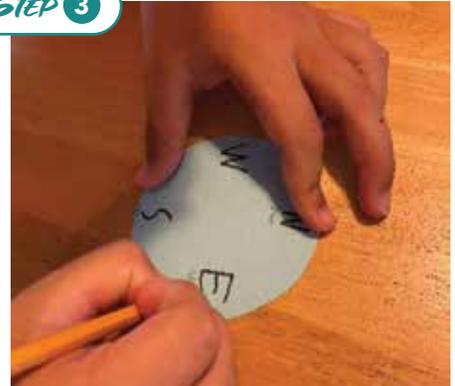
Take your plastic container and trace the base of the plastic container onto the cardstock.

STEP 2



Cut out the circle you just traced.

STEP 3



On your cardstock circle, label the 4 cardinal directions with N, S, E, and W.



For the next couple of steps, ask an adult to help with your cutting tool.

STEP 4



Make an "x" shaped hole in the base of the plastic container.

STEP 5



Cut an "x" in the center of your cardstock circle.

STEP 6



Glue the circle onto the bottom of your plastic container.



Your cardinal direction markings are complete! Follow the steps on the **next page**.



BUILD YOUR WEATHER VANE!

PART TWO

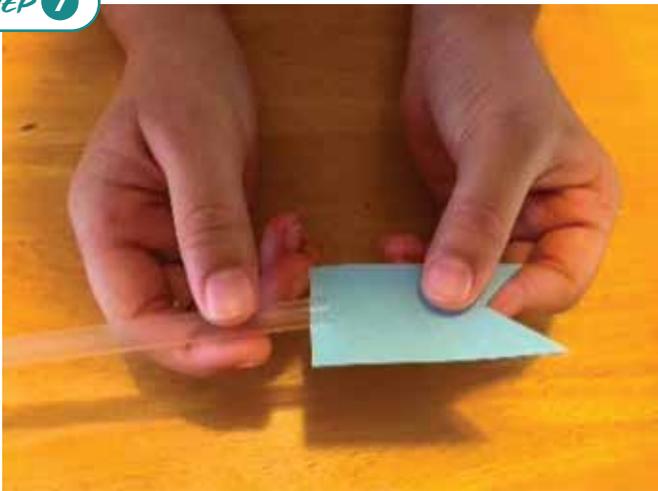
Build your base and directional arrow:

STEP 7



Push your putty or play dough onto the inside of your plastic container lid. **No putty? No Problem! Another option is to fill the container with rocks. Just be sure to leave enough room to stick your pencil through the middle of the container filled with rocks.*

STEP 7



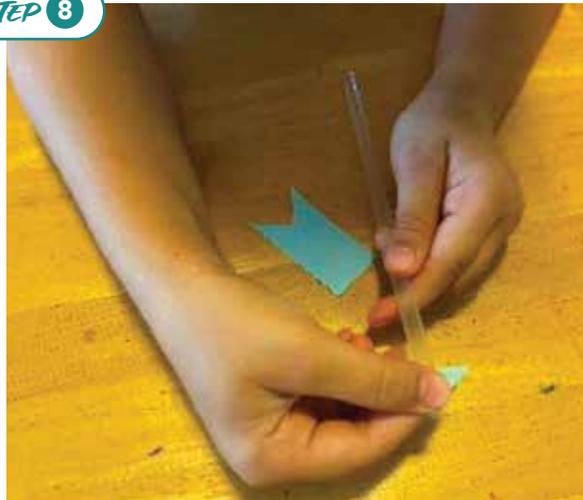
Cut a small triangle out of cardstock for the point of your directional arrow and cut a larger rectangle for the tail. **The back end needs to be large enough to catch the wind.*

STEP 8



Poke an unsharpened pencil through the holes in the cardstock and plastic container with the **eraser side** of the pencil sticking out of the bottom of the plastic container. Then seal your plastic container shut.

STEP 8



Tape the directional arrow and large rectangle tail to the front and back of your straw.

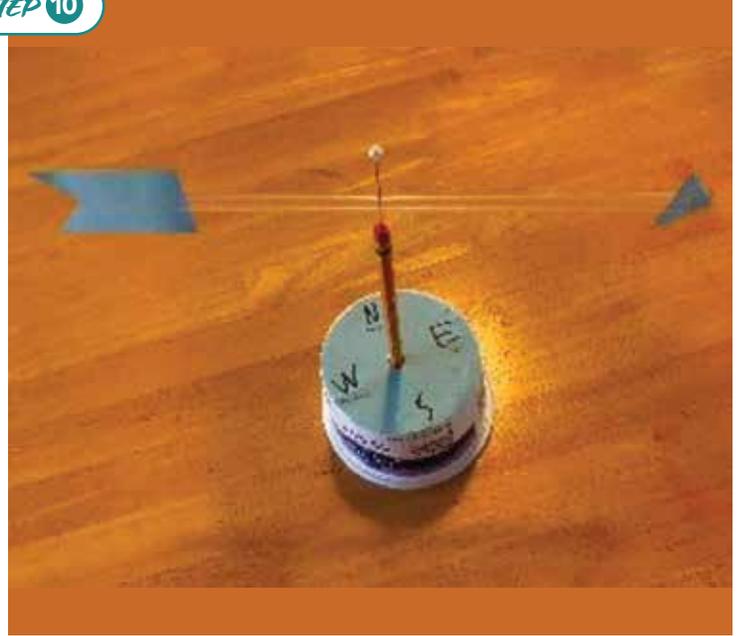


STEP 9



Take your pin and push it through the center of the arrow straw and then into the top of the eraser of the pencil.

STEP 10



Almost finished! Orient the weather vane so that the side with the N is pointing North. Place your weather vane in an area that will "catch" the wind and observe what happens!

Tips!

- There are apps for your phone that can be utilized for a compass to get you started.
- Add rocks inside of your container before sealing to add weight. The weight of this part of the project will prevent it from falling over when the wind blows.
- For the cutting of the arrow, cut a triangle out of one side of the rectangle you cut for the back. It will make the rectangle the shape of a tail/flag without wasting paper.

Be sure to check out other resources at: <https://www.ksbe.edu/digital/holomoana/>



Send us a photo of your family using the Hawaiian Star Compass at your home for a chance to be featured on the Holomoana website! Email it to ittraining@ksbe.edu.



EXTENSION ACTIVITIES

- ✓ **Try adding the Hawaiian terms for these cardinal directions:**
 - NORTH - 'ĀKAU
 - SOUTH – HEMA
 - WEST – KOMOHANA
 - EAST – HIKINA

- ✓ **Talk about why cardinal directions are important.** How would you be able to figure out the cardinal directions using observations of the environment? (i.e The sun rises in the East.)

- ✓ **In the the passing down of stories and traditions within cultures there are usually wise sayings that accompany this knowledge.** In Hawai'i some of these have been recorded as 'ōlelo no'eau. Take a look at these regarding wind for examples:
 - "Nā maka o ka makani."
Eyes of the wind.
'Ōlelo No'eau 2259

 - "Huli ka lau o ka 'ama'u i uka, nui ka wai o kahawai."
When the leaves of the 'ama'u turn toward the upland, it is a sign of a flood.
'Ōlelo No'eau 1137

Interview your family to see if they have any "wise saying" pertaining to wind and weather. Try testing them out or observing them for yourself.



ALAKA'I - TO LEAD, GUIDE, DIRECT

Reflective Questions

- How can using a weather vane help your 'ohana prepare for your day? Try naming 3 things you would do, pack or prep for the day based on your observations of the wind.
- What can you predict when using a weather vane?
- What other kinds of weather instruments are you familiar with? Can you make a homemade version of any of these other instruments.