

# See the Wind



Use a simple windsock to measure wind direction and speed, and construct your own version to decorate your front porch.

4-H Project Area: STEM, Arts & Crafts

Time: 30 minutes

Life Skills: Learning to Learn, Creativity

## Materials:

(for the windsock)

- 8½ x 11-inch sturdy paper or cardstock
- Different colors of crepe paper streamers (other options: tissue paper, strips of colorful plastic bags, fabric or ribbon)
- Kite string or other craft twine
- Paperclips (1 per windsock)
- Tape, tacky glue or hot glue (low setting with adult supervision, allow time for drying)
- Single hole punch

(for demonstration)

- Premade windsock attached to a pole or dowel
- Fan or access to outdoors

## Advance Preparation:

Create one windsock in advance to use in the demonstration and as an example while youth construct their own.

FOR MORE INFORMATION ON LEADING ACTIVITIES FOR YOUNG MEMBERS, SEE CLOVERBUD LEADER GUIDE

## Did You Know?



A wind sock is a type of kite used to detect wind direction and speed. It is a tapered tube of cloth held open at one end by a stiff ring.

As wind is directed down the top or wide end of the sock, the tail of the wind sock points away from the direction the wind is blowing. For example, a windsock pointing north indicates a southerly wind. Wind direction helps forecasters predict the weather.

Wind speed is indicated by the windsock's angle relative to the mounting pole, if there are low winds, the windsock droops, while in high wind, the windsock flies horizontally.

## THE ACTIVITY

Meteorologists, scientists that study weather, use things like temperature, wind direction and speed and clouds to predict the weather to help people be prepared.

Tell the group today they will learn how wind is used to predict the weather and will make their own wind sock.

### Ask

*How does weather affect your life?*

*What do you need to think about before going outside?*

Have youth look outside and ask them to describe the weather (encourage details.)

### Investigate

Place a fan on a table and hold up the demonstration windsock as you turn on the fan.

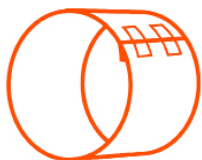
*Ask, What does the wind sock do in the wind?*

(The wind sock should line up with the wind and the strips should move toward a horizontal position.)

*How can you tell which direction the wind is coming from?*

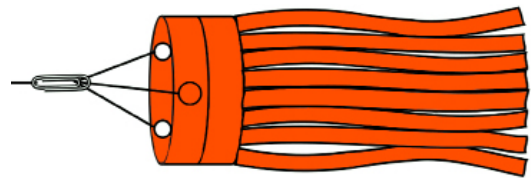
*What else can a windsock tell you besides the direction the wind is coming from?*

### Create



Have children create their own windsock to take home.

- Have children decorate their cardstock. Staple or tape the cardstock to make a ring.



- Tape or glue streamers along the bottom edge of the ring
- Punch three holes equal distance around the paper ring at the top edge of the ring.
- Cut 3 pieces of string about 12” long. Tie one end of each string to the wind sock at each of the 3 holes.
- Tie the 3 loose ends of the string to a single paperclip. Tie an additional 12” string to the paperclip.

### Share/Reflect

Have children show their finished windsock to the group.

*Ask, Where might you hang your wind sock?*

*What are some things you might consider before hanging a windsock outside?*

### Relationship to 4-H:

4-H is a program where young people make choices about their own learning and explore the topics that interest them. The 4-H project is one way this takes place. Help new members and families discover what there is to learn as they grow with 4-H. Invite older members to talk about their projects with younger members. Take time to explain to parents the projects offered through the club and county.

### More to Explore

Use plastic bags or ribbon/fabric to make a wind sock that is more weather resistant. Spend more time decorating the windsocks—koi fish and American flags are popular design motifs.



Today we created our own windsock, a tool used to detect wind direction and speed.



## See the Wind

**We learned...** about predicting the weather to help us plan and be prepared. A windsock is one tool to forecast the weather. The tail of the windsock points away from the direction that the wind is blowing. A windsock pointing north indicates a southerly wind.

**Ask your child...** What did you learn about weather today?

Tell me about your windsock?

Where do you think we can hang your windsock?

**Explore more...** Learn what the shape of clouds can also tell you about the weather by watching this video at PBS learning media:

<http://wimedialab.pbslearningmedia.org/resource/evscps.sci.life.clouds/clouds-and-weather/>

Keep track of the wind direction using your windsock and the daily cloud shape and see if you can start to predict the weather.

**Connect to 4-H...** 4-H is a place where young people get to make choices about their own learning and explore topics that interest them. A 4-H Project is a way that older members learn about new topics and gain new skills. Guided by youth and adult project leaders, members complete hands-on learning selected from over 150 topics — including photography, foods, animals, plant science, cultural arts, and robotics.