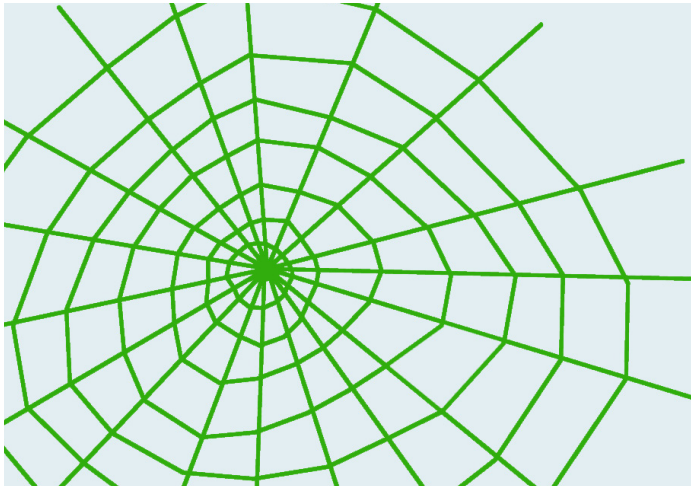


# Building A Web



Use teamwork to create a giant spider web and discover what makes webs strong.

4-H Project Area: Entomology

Time: 20 minutes

Life Skills: Teamwork, responsibility, character, sharing, leadership

## Materials:

- Ball of yarn (large)
- 1 balloon
- scissors

## Advance Preparation:

Blow up 1 balloon

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

Webs need to be strong enough to support the weight of the spider and connected across the entire surface so they feel when someone or thing touches it. Spiders usually sit near the center of the web and wait for movement from the center.

## THE ACTIVITY

Explain that we are going to create our own web as a group.

## Did You Know?

All spiders spin silk. The spider's silk is one of the strongest materials known. Ounce for ounce, it is as strong as steel, can stretch, and remains flexible in extreme temperatures. It is so light, one pound of silk could stretch into a single strand that would wrap around the entire earth. Spiders use their silk to catch themselves (called a dragline), make a cocoon to protect eggs, and of course to make webs.



## Ask

*Have you ever seen a spider web?*

*Where?*

*What did it look like?*

## Investigate

Hold up a ball of yarn. **Ask, *How can the ball could be used to create a web?*** Since we are not spiders, and we cannot spin silk, we will use this ball of yarn to create a web that connects us all.



## Create

Ask the participants to get into a circle. Begin the ball of yarn with a volunteer. Instruct the volunteer to hold on to the end of the string, and toss the rest of the ball to someone on the other side of the circle. When the person catches the ball of yarn, they should say their name. Tell them to hold on to the position on the string, and pass the ball of yarn across to another person. Continue this process until everyone has been passed the string. End by passing the ball back to the first volunteer.

Ask participants to imagine this is a real spider web and the balloon is a fly. **Ask, *Is the web strong enough to support the balloon (the fly)? Will it fall through the holes? What can we do to strengthen the web?***

Invite the participants to try techniques to make the web stronger (adding additional connections, getting closer together to make the yarn tighter, etc.).

Remind them that if one person lets go of their yarn, it will be felt across the whole web. Just like a spider! And, the balloon (the fly) could more easily escape.

Invite a youth to crawl under the web and go to the middle, as you take their string ends. Ask the youth to lightly touch the yarn and ask one other participant to lightly move their strings. Can the child in the middle feel movement? That is what a spider feels—light movement!

## Share/Reflect

***Do you think webs can be unraveled or taken apart easily? Why or Why not?***

***What happened when the balloon was put on the web first? How did you make the web strong?***

### Relationship to 4-H

4-H gives children the opportunity to grow and learn LEADERSHIP skills. Your role as the facilitator can help even the youngest children practice leadership skills.

It starts with adults inviting youth to make a meaningful contribution to the group. Ask young children to share their interests and talents with the group. Create opportunities for them to lead games and ice breakers at the beginning of the meeting.

Your encouragement matters. Children continue to develop skills and confidence when they feel valued and recognized for their contributions.



Today we made a web by passing a ball of yarn around the circle of children and volunteers. Then we talked about how important our connections were when we make friends and stay together as a group.



## Building A Web

**We learned...** about the strength of spider's silk and webs. As we made our own web, we discovered how to make it strong - everyone has to hold on to their end of the string and everyone needs to be included.

**Ask your child...** Ask your child to talk about the web of yarn: How big was the web? What happened if someone dropped their yarn? How did you decide who to pass the yarn to next? What happened when everyone had a piece of yarn?

Ask your child questions about webs: Who makes webs? Why do they make webs?

**Explore more...** Take a walk around an outdoor space-your backyard, a park, or a green space. Have your child look for spider webs. When they find them, ask questions about the size and shape of the web. Have them look for the spider and ask where he is located. You can borrow books from your local 4-H office or the library on spiders and their webs. You can make your own web at home. Webs are versions of weaving, so have your child weave cut paper or lacing. For additional ideas: <http://carrotsareorange.com/exploring-spider-webs/>

**Connect to 4-H...** Just like the ball of yarn connecting people to people, 4-H wants to do that too. One of the best things you can do in 4-H is meet new people and make friends. We can do this by going to meetings and saying hi to new children- or children we have not met. Ask them questions and get to know their names and things they like. The more you learn about someone else, the more you find out you might have in common - and that is what helps us make friendships.