

4-H Robotics Volunteer Kit:

A 4-H robotics volunteer works with their local county Extension Agent to find the <u>tools</u> needed to build their robotics club.

They realize that it is easy to <u>blow</u> things out of proportion and get off-balanced. The best clubs should aim to be educational and  $\underline{\rm FUN}.$ 

They teach life skills such as teamwork, leadership, and critical thinking <u>brick by</u> <u>brick</u> because they realize these skills are the foundation for youth to successfully <u>invent</u> their future.

Volunteers are asked to be <u>flexible</u> when things are a <u>little rough</u> and always remember that it is better to have <u>a red ribbon</u> project and <u>blue ribbon</u> 4-H youth, than a red ribbon youth with a blue ribbon project.

Being a volunteer takes about 4-6 <u>hours</u> a month (except for competition season) and more importantly it takes HEART. If you are willing to invest in your local youth, we want you to be a 4-H Robotics Volunteer.





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### Got Balloons?

Then you have instant teamwork building opportunities! You can...

- Blow up as many balloons as possible. Give each group of 3-4 youth a roll of masking tape and tell them that they have 3 minutes to build the tallest balloon tower they can. Balloons cannot touch a wall, they must be freestanding.
- 2. Place a penny in a balloon, make sure it goes all the way inside the balloon. Tie the balloon. Grasp the top of the balloon (where the knot is) and swirl the balloon around in a circular motion. The penny should start to spin inside the balloon. Stop swirling the balloon. The penny keeps spinning, why?

#### Got a D battery?

Then you have an invention in the making. Take a D battery, aluminum foil, and 1.5V lightbulb and place the items in front of the youth. Ask you to make the lightbulb glow.

Questions to ask:

Which is the positive and negative end of the battery? How did you know?

How did you get the energy from the battery to the lightbulb? What did the aluminum foil do?

How many other variations can you try and still get the lightbulb to work?

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