

To Make a 4-H Robotics Volunteer Kit:

- 1. Print the 4-H Robotics Volunteer card.
- 2. Obtain the necessary volunteer supplies. These are just suggestions.

Tools—mini tool kit from a dollar store

Blow-two balloons

 $\ensuremath{\mathsf{FUN}}\xspace$ be sure to print the back of the volunteer card for $\ensuremath{\mathsf{FUN}}\xspace$ ideas

Brick by brick—2 or 3 Lego bricks

Invent—One 'D' battery, small piece of aluminum foil, and 1.5 volt lightbulb

Flexible—One rubber band

A little rough—A band-aid

Red ribbon—a red 4-H ribbon or print out of one

Blue Ribbon—a blue 4-H ribbon or print out of one

Hours—a timer from the dollar store

- 3. Print a 4-H Robotics sticker.
- 4. Place the volunteer supplies in a brown paper bag and seal with the sticker!





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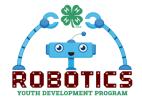
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Got Balloons?

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.
- 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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