

# Engineering & Safety Science



## *Did you know...*

This project is designed for 4-H members who enjoy learning about engineering techniques, including designs, revisions or providing safe environments.

## *What can I do...*

- Give a demonstration to your classmates on bicycle safety
- Enter the 4-H Piggy Bank Pageant by designing and building your own bank
- Conduct a service project for the local food bank with your 4-H club to engineer a “Can-struction”

## *Check this out...*

This activity gives you a glimpse of what this project is about. In the Engineering and Safety Science project, you should look for things to build, ways to check and safer methods to accomplish.

Directions: Check the box next to the statements where a 4-H'er would be trying to make their environment safer.

- Picking up sticks in the yard before mowing
- Leaving wet areas after a spill
- Driving under the speed limit



## *Future Thoughts...*



What kind of career would someone in the Engineering and Safety Science project want to pursue?

- Health Engineers inspect facilities and machinery at places like hospitals, nursing homes or community centers
- Safety engineers inspect safety equipment to identify and correct potential safety hazards
- An electrician, architect and mechanical technician would also fit in this area

Do you know what all of these professions do in their job? If not, do some research and dig a little deeper.

## *Work on this...*

### Engineer the Tallest Tower

Using only ten pieces of regular printer paper and three feet of masking tape, construct the tallest free-standing tower possible. Use a tape measure to measure the height.

Recruit a family member or a friend to help you with this activity. Record your observations and the methods used to build your tower.

## *What's Next?*

Contact your local 4-H Agent on other ways you can get involved with this project and with 4-H.

- 4-H Project Showcase
  - Junior High 4-H Academic Conference
  - Start preparing to submit a portfolio in this project area
  - Begin taking action photos of you doing activities in this project area
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