

## Engineer Requirements

Do both of these:

1. Talk to an engineer, surveyor, or architect in your area about the different occupations in engineering. Create a list that tells what they do.
- 2. Draw a floor plan of your home. Include doors, windows, and stairways.**

*Readyman Requirement #11 - Make a home fire escape plan for your family.*

And do four these:

3. Visit a construction site. Look at a set of plans used to build the facility or product. Tell your Webelos den leader about these. (Get permission before you visit.)
4. Visit a civil engineer or surveyor to learn how to measure the length of the property line. Explain how property lines are determined.
5. Tell about how electricity is generated and then gets to your home.
- 6. Construct a simple working electrical circuit using a flashlight battery, a switch, and a light.**

*See below*

- 7. Make drawings of three kinds of bridges and explain their differences. Construct a model bridge of your choice.**

*See below*

- 8. Make a simple crane using a block and tackle and explain how the block and tackle is used in everyday life.**

*See below*

- 9. Build a catapult and show how it works.**

*Craftsman Requirement #2 - With adult supervision and using hand tools, construct two different wooden objects you and your Webelos den leader agree on,... Use a coping saw or jigsaw for these projects. Put them together with glue, nails, or screws. Paint or stain them.*

*Craftsman Requirement #4 - Make four useful items using materials other than wood that you and your Webelos den leader agree on, such as clay, plastic, leather, metal, paper, rubber, or rope. These should be challenging items and must involve several operations.*

- 10. While you are a Webelos Scout, and if you have not earned it for another activity badge, earn the Cub Scout Academics belt loop for Mathematics.**

*Complete these three requirements:*

1. *Do five activities within your home or school that require the use of mathematics. Explain to your den how you used everyday math.*
2. *Keep track of the money you earn and spend for three weeks.*
3. *Measure five items using both metric and non-metric measures. Find out about the history of the metric system of measurement.*