

Girl Scouts
Women In Construction Interest Project Award
For Girl Scout Cadettes, Seniors and Ambassadors

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For Girl Scout Cadettes, Seniors and Ambassadors

Have you ever wondered how a skyscraper, a school or even your house was built? The answer is simple: construction professionals built them all. Did you know that some of those professionals are actually women architects, engineers, construction managers/administrators and skilled trades' workers? The construction industry has long been portrayed as a male-dominated industry, however; construction is also a large employer of women and minorities.

Everyday people travel on roads, work in buildings, shop in malls and live in a home or apartment. Construction is a fact of our daily lives. Therefore, it is no surprise that construction also offers limitless job opportunities at all levels. This project will introduce you to the construction industry and specifically, the role of a 'Woman In Construction'.

To earn this award, Girl Scout Cadettes, Seniors and Ambassadors must complete two (2) Skill Builders activities, one (1) technology activity, one (1) service project activity, one (1) career exploration activity, and two (2) activities from a category(s) of their choice.

Technology (complete at least one)

1. Visit www.nawic.org and learn about the **National Association of Women in Construction (NAWIC)**. Write a one-page paper about the organization.
2. Visit or arrange a tour of a historic and/ or well-known building to learn about the construction of that building. Were there any women working on the construction of the building? Write a one-two page paper on your visit and experiences. Examples of buildings that may be considered, but not limited to:
 - a. Empire State Building, New York City, New York
 - b. Sears Tower, Chicago, IL
 - c. GM Renaissance Center-Detroit, MI
 - d. Mackinaw Bridge, Mackinaw City, MI
 - e. Frank Lloyd Wright buildings- May be found across the country.
 - f. Other: Local buildings of historic and/or significant importance to your community.
3. Research the four construction sectors (listed below). What type of building happens in each sector? Which sector is considered the largest and the smallest? Write a one-two page paper on your findings.

Construction Sectors

Residential

Commercial

Industrial

Heavy Highway/Infrastructure

4. Contact a local contractor and arrange a tour of an ongoing construction project in your community. Ask the following questions and write a one-two page paper on your findings.

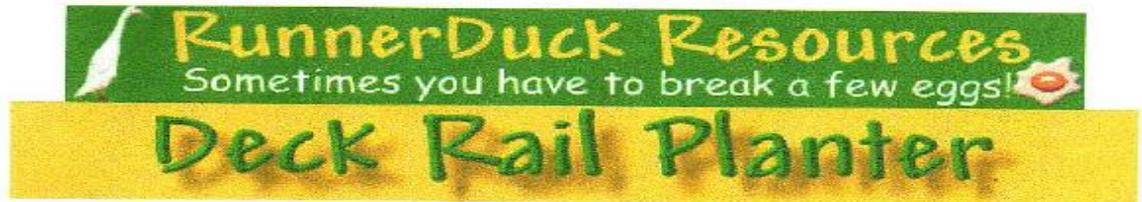
Questions

1. Who are the owner, architect and contractor for the project?
2. Is this a new construction or a renovation project?
3. Is it a public or private project?
4. When is the project expected to be completed?
5. What are the employment opportunities on the project?
6. Are there women working on the project?

5. Have a TomBoy Tool party and learn about tools made especially for women and how they can be used on various home projects. Visit www.tomboytools.com to find a consultant in your area. Please provide pictures of your party.
6. Research and locate the colleges, universities and apprenticeship schools that offer degrees or certificates in construction. Take note of all the various career options and create a list and share it with your friends.

Skill Builders (complete at least 2 Activities)

1. Build a planter box using the following instructions. Please provide pictures of activity in process and completed project.



This is a wonderful way to show your summer flowers around your deck. These planters are easy to build and can be made from scrap wood. Like many of our projects you easily make them to fit your situation. We made our planter to fit a long narrow plastic planter and go over a 2" X 6" deck rail. You can make yours to fit any size planter or make it a planter all by its self.



Here's what you'll need:

- 3/4" X 6" X 25" cedar fencing scraps.
- 2" X 2", 12" long
- Glue
- Nails

Cut the following pieces:

- Sides (2) 3" X 25"
- Sides (2) 3 1/2" X 25"
- Bottom (3) 2 1/2" X 24"
- Ends (2) 8" X 5 1/4"
- Spacers (4) 1 1/4" X 1 1/2"

Glue and nail the 3" top sides flush to the top of the outside of the end pieces. Glue and nail the 3 1/2" sides 1/4" below the top sides. The overhang is what holds the planter on the rail.



Glue and nail the bottom pieces 1/2" above the bottoms of the end pieces. This is to hold the bottom of the planter up off the deck rail to help prevent water entrapment and rot. Glue and nail the spacers near each end of the bottom sides. This will center the planter on the deck rail.

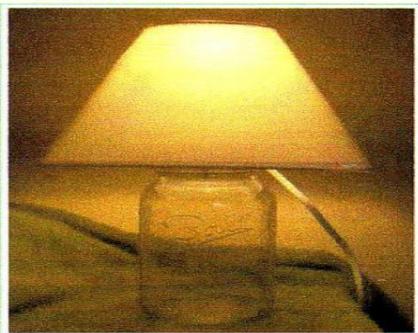
If you are going to put dirt into the planter then make the bottom pieces a little larger so there is less space between them. You want the water to run out so the roots of the plants don't rot. You'll also want to put a solid piece on each side.

You can also put a cap around the planter to give it a little more character.

Have fun with this project and happy planting.

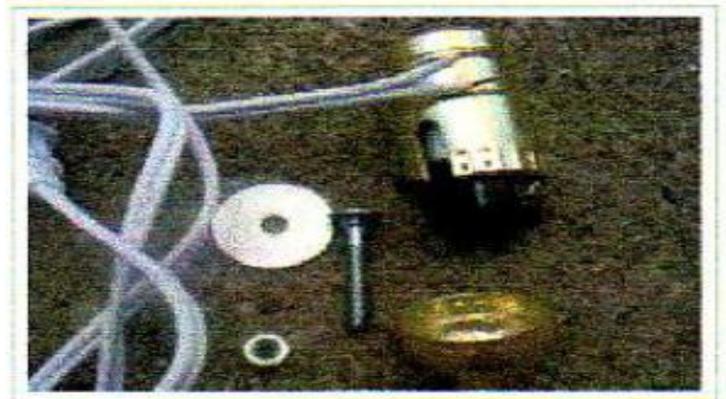
2. Build a Mason Jar lamp using the following instructions. Please provide pictures of activity in process and completed project.

Mason Jar Lamp



Supplies:

light socket
lamp electrical cord
carriage bolt 1 1/2" long 1/4" thick
hex nut 1/4"
fender washer 1/4"
Mason Jar
lamp shade
Dremel
light bulb



2. Drill a hole in the side of the socket bottom.



3. Insert the lamp cord through the hole you just drilled in the socket.



4. Following the package directions, attach the cord to the screws on the socket.



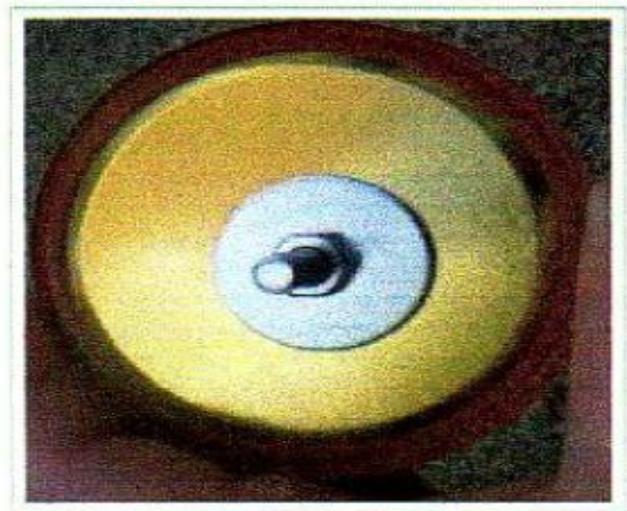
5. Insert the bolt into the bottom of the socket base. Lightly push socket into base.



6. Put the socket cover over the socket and push until it snaps in place.



7. Place the bolt into the hole on the lid. Secure tightly with the washer and nut. Make sure it is centered (ours is not due to the large hole we messed up)



8. Put the rim of the jar over the socket and pull the cord through. It is now ready to be placed on top of you mason jar.



3. Contact your local Home Depot store and arrange for a home repair workshop/clinic for you troop. Visit www.homedepot.com to find a store near you. Please provide pictures of your experience.
4. Research and construct a project of your own choosing. Examples may include but are not limited to: bird houses, jewelry boxes, key holders, pavers, etc. Please provide pictures of activity in process and completed project.

Career Exploration (complete at least 1 activity)

1. Invite a woman working within the construction industry to speak with your troop. You may contact local contractors or visit www.nawic.org to find a local woman in construction. Write a one-page paper on what you learned from your guest.
2. Attend a Construction Career Days event in your area. Visit www.uritc.uri.edu/nccdc/ for information on an event in your area or State.
3. Attend a MAGIC (Mentoring A Girl In Construction) Camp. This is a free, one-week, day camp designed to introduce high school girls (ages 15-19) to exciting careers in construction. MAGIC Summer Camp offers high school girls the opportunity to learn about the countless avenues of employment available to women within the construction industry and to engage these young women via hands-on training in basic construction skills. This opportunity to gain marketable skills and to experience the exhilaration of successfully performing difficult tasks builds self-confidence and boosts self-image. Each camp is sponsored through a NAWIC Chapter. Please visit www.mentoringagirlinconstruction.com or www.nawic.org to find a chapter near you that is offering the camp.
4. Attend a NAWIC Education Foundation (NEF) Block Kids event. Block Kids is a one-day program for girls and boys in grades 1-6. The program teaches the participant construction through a hands-on construction-related project made of interlocking building blocks, and a choice of three: string, rock, poster board or aluminum foil. Please visit www.nawic.org or www.nawiceducation.org to find a chapter near you that is offering a NEF Block Kids event.
5. Participate in an NEF CAD/Design/Drafting Competition for high school students. This is a program that allows high school students an opportunity to design a project through a set of guidelines and requirements set by the NEF. NAWIC Chapters are responsible for administering this project to area schools and groups. Please visit www.nawic.org or www.nawiceducation.org to find a chapter near you that is offering a NEF CAD/Design/Drafting Competition.
6. Participate in an NEF sponsored Garden Shed Project. This project is for middle-school aged children to introduce them to construction techniques and the industry. The students are directed by instructors on how to build a shed or garage through the guidelines and requirements set forth by the NEF. To find out the requirements, please visit www.nawiceducation.org or visit www.nawic.org to find a local chapter participating in this event.
7. Interview a woman working within the construction industry and find out about her experiences and successes within the industry. The following is a list of suggested questions, but you are not limited to only these questions Write a newspaper or magazine worthy article on the woman you interviewed.
 - a. What is your current job position?
 - b. What other positions have you held within the industry?
 - c. How long have you been employed within the industry?
 - d. What kind of training is required of your job?
 - e. What is a typical workday like for you?
 - f. How did you become interested in construction?
 - g. Do you belong to any organizations such as NAWIC?

Service Projects (complete at least one activity)

1. Contact your local Habitat for Humanity to schedule and work on an upcoming building project. Visit www.habitat.org to find your local affiliate. Please provide pictures and a one-page summary of your experience.
2. Contact a local homeless shelter, domestic violence shelter, children's hospital, or the like and see if there is a small or minor renovation/construction/improvement participate and/or help to complete. These activities should be limited to small activities such as; painting/wallpapering, planting flowers/garden, hanging pictures and the like. It is not recommended or encouraged to take on large projects especially those that need the direction of a licensed builder. All activities must be supervised by a troop leader and/or adult. Please provide pictures and a one-page summary of your experience.
3. Contact your local community officials to determine if there is a community project such as; a garden/landscaping project, playground, community center or the like that you may be able to participate and/or help complete. This could be a whole or partial project. These activities should be limited to small activities such as; painting/wallpapering, planting flowers/garden, hanging pictures and the like. It is not recommended or encouraged to take on large projects especially those that need the direction of a licensed builder. All activities must be supervised by a troop leader and/or adult. Please provide pictures and a one-page summary of your experience.
4. Contact a local animal shelter, bird sanctuary or the like to determine if they need dog houses, bird houses, bat houses or the like for their location. Find or determine the building plans and/or templates to for those mentioned above and donate to the shelter. These should be small projects and completed solely under the supervision of a troop leader or adult. Please provide pictures and a one-page summary of your experience.
5. Create your own troop service project. As a troop, find something that you like to build such as; birdhouses, jewelry boxes, dog houses, or the like. The items may also be a combination of several of the above mentioned or the like. Under the direct supervision of your troop leader or adult, create your projects and decorate as you like (the more creative the better!). After the projects are completed, set up an auction or silent auction event to raise money for your troop's favorite charity or upcoming troop endeavor. Please provide pictures and a one-page summary of your experience.
6. Contact a local NAWIC Chapter and volunteer for one of their upcoming industry and/or community events. Many chapters need volunteers to make an event or project successful. Visit www.nawic.org to find a local chapter and contact information. Please provide pictures and a one-page summary of your experience.