

Engineer

Webelos Activity Badge Workbook



The work space provided for each requirement should be used by the Webelos Scout to make notes for discussing the item with Akela, not for providing the full and complete answers. Each Webelos Scout must do each requirement.

No one may add or subtract from the official requirements found in the **Webelos Handbook** (Pub. 33452)

This workbook was updated in May 2013.

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about this **workbook** to: Workbooks@USScouts.Org

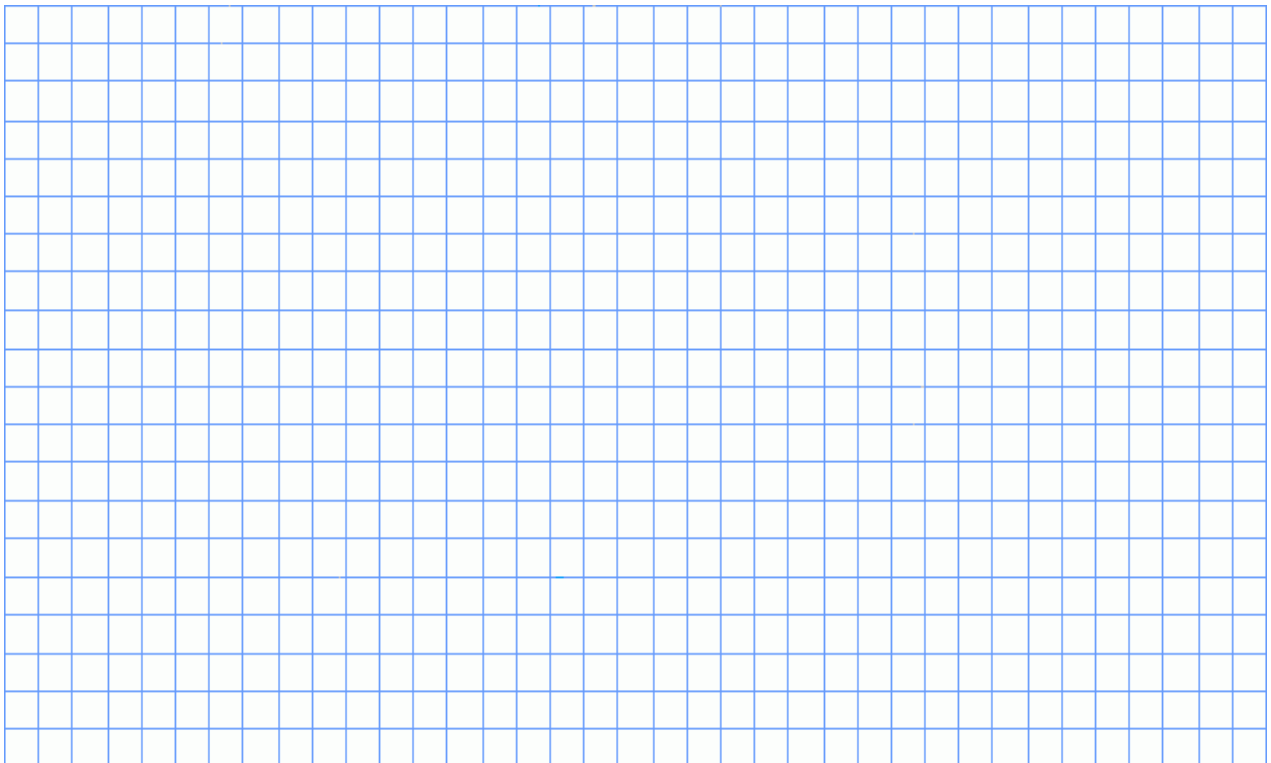
Comments or suggestions for changes to the **requirements** for the **activity badge** should be sent to: Advancement.Team@Scouting.Org

Webelos Scout's Name: _____ Pack No. : _____

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 house. Include doors, windows, and stairways.



And do four of these:

- 3. Visit a construction job. 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 a property line. Explain how property lines are determined.

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- 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.

7. Make drawings of three kinds of bridges and explain their differences.

1.	Type:	

2.	Type:	

3.	Type:	

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- Construct a model bridge of your choice.

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

- 9. Build a catapult and show how it works.
- 10. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Mathematics.

Note: *For requirement 10 you must earn the Mathematics Belt Loop while you are a Webelos Scout. (even if you earned it while in a Cub Scout Den).*

Requirement resources can be found here:
http://www.meritbadge.org/wiki/index.php/Engineer#Requirement_resources

Important excerpts from the 'Guide To Advancement', No. 33088:

Effective January 1, 2012, the *'Guide to Advancement'* (which replaced the publication *'Advancement Committee Policies and Procedures'*) is now the *official* Boy Scouts of America source on advancement policies and procedures.

- **[Inside front cover, and 5.0.1.4] — Unauthorized Changes to Advancement Program**
No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements.
(There are limited exceptions relating only to youth members with disabilities. For details see section 10, "Advancement for Members With Special Needs".)
- **[Inside front cover, and 7.0.1.1] — The 'Guide to Safe Scouting' Applies**
Policies and procedures outlined in the *'Guide to Safe Scouting'*, No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects. [Note: Always reference the online version, which is updated quarterly.]
- **[4.1.0.3] — Who Approves Cub Scout Advancement?**
A key responsibility for den leaders is to implement the core den meeting plans as outlined in the Den & Pack Meeting Resource Guide, No. 34409. For Wolf, Bear, and Webelos advancement, den leaders take the lead in approving requirements, though their assistants, and also parents who help at meetings, may be asked to play the role of "Akela" and assist. Parents sign for requirements that, according to meeting plans and instructions in the handbooks, take place at home. For the Bobcat trail and Tiger Cub achievements, parents (or adult partners) should sign in the boy's handbook; the den leader then approves as progress is recorded in the den's advancement record.
- **[4.1.0.4] — "Do Your Best"**
Advancement performance in Cub Scouting is centered on its motto: "Do Your Best." When a boy has done this—his very best—then regardless of the requirements for any rank or award, it is enough; accomplishment is noted. This is why den leaders, assistants, and parents or guardians are involved in approvals. Generally they know if effort put forth is really the Cub Scout's best.
- **[4.1.2.2] — Cub Scout Academics and Sports Program**
More than just a recognition opportunity, this program develops new skills, improves those existing, and otherwise enriches Cub Scouting. Details can be found in the Cub Scout Academics and Sports Program Guide, No. 34299. Activities include subjects like science, video games, collecting, and chess; and sports such as baseball, skateboarding, and table tennis. Each has two levels—a belt loop and a pin. Belt loops, which can be earned more than once, are awarded when each of three requirements is met. Cub Scouts may then continue with additional requirements and earn the pin. Archery and BB gun shooting are included, but can only be conducted at a council presented activity with certified supervisors.

Additional notes of interest:

- Webelos Scouts may complete requirements in a family, den, pack, school, or community environment.
- **"Akela"** (Pronounced "Ah-KAY-la") — Title of respect used in Cub Scouting—any good leader is *Akela*. *Akela* is also the leader and guide for Cub Scouts on the advancement trail. The name comes from Rudyard Kipling's *Jungle Book*. (See "Law of the Pack.")
- **"Law of the Pack"** —
The Cub Scout follows Akela.
The Cub Scout helps the pack go.
The pack helps the Cub Scout grow.
The Cub Scout gives goodwill.