



# Surveying

## Merit Badge Workbook



This workbook can help you but you still need to read the merit badge pamphlet.

This Workbook can help you organize your thoughts as you prepare to meet with your merit badge counselor.

You still must satisfy your counselor that you can demonstrate each skill and have learned the information.

You should use the work space provided for each requirement to keep track of which requirements have been completed, and to make notes for discussing the item with your counselor, not for providing full and complete answers.

If a requirement says that you must take an action using words such as "discuss", "show", "tell", "explain", "demonstrate", "identify", etc, that is what you must do.

**Merit Badge Counselors may not require the use of this or any similar workbooks.**

No one may add or subtract from the official requirements found in Scouts BSA Requirements (Pub. 33216 – SKU 653801).

The requirements were last issued or revised in 2005 • This workbook was updated in June 2020.

Scout's Name: \_\_\_\_\_ Unit: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_ Email: \_\_\_\_\_

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

Please submit errors, omissions, comments or suggestions about this **workbook** to: [Workbooks@USScouts.Org](mailto:Workbooks@USScouts.Org)  
 Comments or suggestions for changes to the **requirements** for the **merit badge** should be sent to: [Merit.Badge@Scouting.Org](mailto:Merit.Badge@Scouting.Org)

- Show that you know first aid for the types of injuries that could occur while surveying, including cuts, scratches, snakebite, insect stings, tick bites, heat and cold reactions, and dehydration.

Cuts:


Scratches:


Snakebite:


Insect stings:

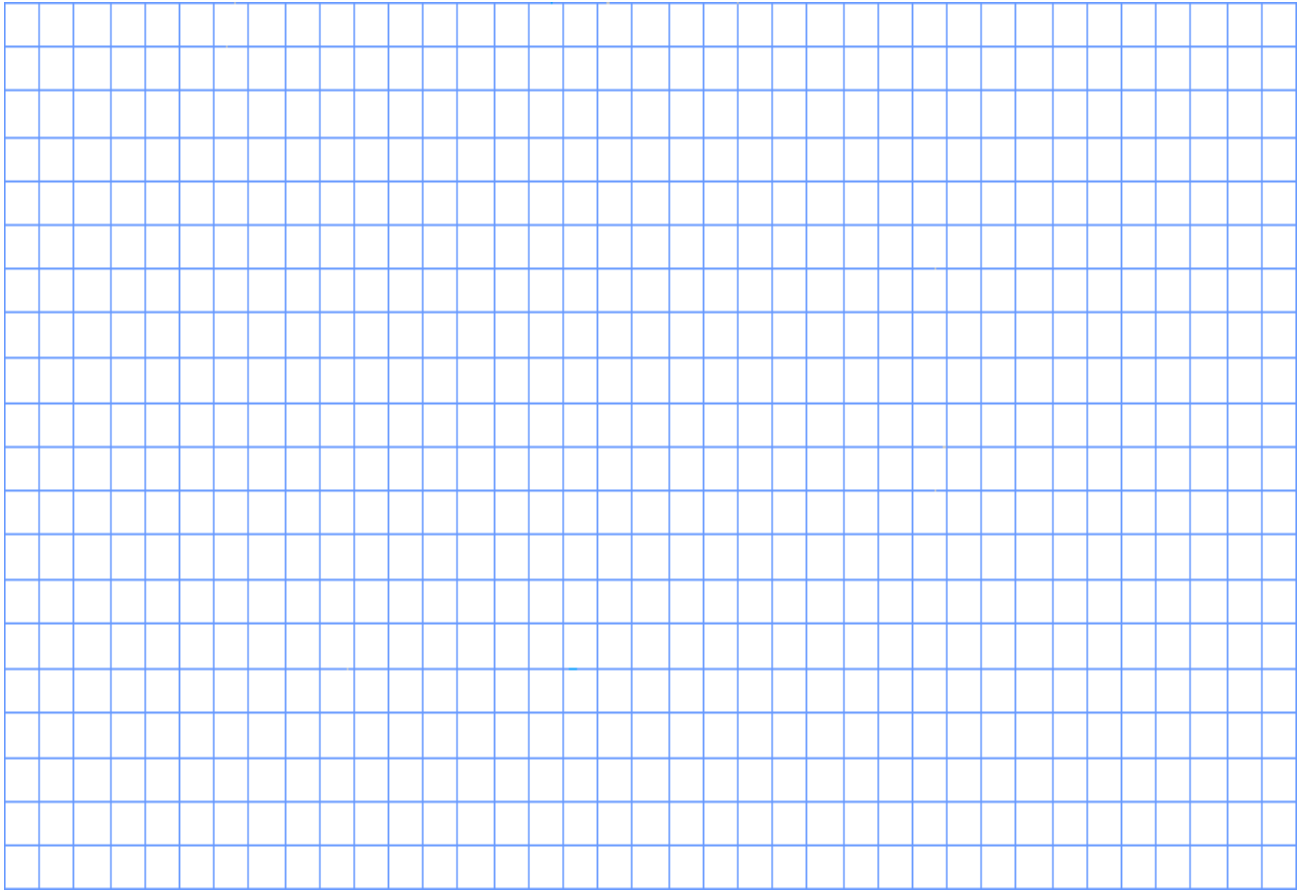

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- 3. From the field notes gathered for requirement 2, draw to scale a map of your survey. Submit a neatly drawn copy.



- 4. Write a metes and bounds description for the five-sided lot in requirement 2.

A large rectangular area with horizontal lines for writing a metes and bounds description.

Surveying

Scout's Name: \_\_\_\_\_

- 5. Use one of the corner markers from requirement 2 as a benchmark with an assumed elevation of 100 feet. Using a level and rod, determine the elevation of the other four corner markers.

Corner 1 assumed elevation:            100    feet

Corner 2 elevation:                    \_\_\_\_\_ feet

Corner 3 elevation:                    \_\_\_\_\_ feet

Corner 4 elevation:                    \_\_\_\_\_ feet

Corner 5 elevation:                    \_\_\_\_\_ feet

- 6. Get a copy of the deed to your property, or a piece of property assigned by your counselor, from the local courthouse or title agency.

- 7. Tell what GPS is; discuss with your counselor the importance of GPS and how it is changing the field of surveying.


- 8. Discuss the importance of surveying with a licensed surveyor.


Also discuss the various types of surveying and mapping, and applications of surveying technology to other fields.


Discuss career opportunities in surveying and related fields.


Discuss the qualifications and preparation for such a career.


**When working on merit badges, Scouts and Scouters should be aware of some vital information in the current edition of the *Guide to Advancement* (BSA publication 33088). Important excerpts from that publication can be downloaded from <http://usscouts.org/advance/docs/GTA-Excerpts-meritbadges.pdf>. You can download a complete copy of the *Guide to Advancement* from <http://www.scouting.org/filestore/pdf/33088.pdf>.**