



# Orienteering

## Merit Badge Workbook

This workbook can help you but you still need to read the merit badge pamphlet (book). No one can add or subtract from the Boy Scout Requirements #33215. Merit Badge Workbooks and much more are below: [Online Resources](#).

Workbook developer: [craig@craiglincoln.com](mailto:craig@craiglincoln.com). Requirements revised: 2003, Workbook updated: November 2008.

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

Counselor's Name: \_\_\_\_\_ Counselor's Ph #: \_\_\_\_\_

1. Show that you know first aid for the types of injuries that could occur while orienteering, including

cuts, \_\_\_\_\_

scratches, \_\_\_\_\_

blisters, \_\_\_\_\_

snakebite, \_\_\_\_\_

insect stings, \_\_\_\_\_

tick bites, \_\_\_\_\_

heat and cold reactions (sunburn, \_\_\_\_\_

heatstroke, \_\_\_\_\_

heat exhaustion, \_\_\_\_\_

hypothermia), \_\_\_\_\_

and dehydration. \_\_\_\_\_

Explain to your counselor why you should be able to identify poisonous plants and poisonous animals that are found in your area.

2. Explain what orienteering is. \_\_\_\_\_

3. Do the following:

(a) Explain how a compass works. \_\_\_\_\_

Describe the features of an orienteering compass. \_\_\_\_\_

(b) In the field, show how to take a compass bearing and follow it. \_\_\_\_\_

4. Do the following:

(a) Explain how a topographic map shows terrain features. \_\_\_\_\_

Point out and name five terrain features on a map and in the field.

(b) Point out and name 10 symbols on a topographic map.

(c) Explain the meaning of declination. \_\_\_\_\_

Tell why you must consider declination when using map and compass together. \_\_\_\_\_

(d) Show a topographic map with magnetic north-south lines. \_\_\_\_\_

(e) Show how to measure distances on a map using an orienteering compass. \_\_\_\_\_

(f) Show how to orient a map using a compass. \_\_\_\_\_

5. Set up a 100-meter pace course. \_\_\_\_\_

Determine your walking \_\_\_\_\_

and running pace for 100 meters. \_\_\_\_\_

Tell why it is important to pace-count. \_\_\_\_\_

6. Do the following:

(a) Identify 20 international control description symbols. Tell the meaning of each symbol.

Symbol	Tell the meaning of each symbol.	Symbol	Tell the meaning of each symbol.
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(b) Show a control description sheet and explain the information provided.

(c) Explain the following terms and tell when you would use them:

attack point, \_\_\_\_\_

collecting feature, \_\_\_\_\_

aiming off, \_\_\_\_\_

contouring, \_\_\_\_\_

reading ahead, \_\_\_\_\_

handrail, \_\_\_\_\_

relocation, \_\_\_\_\_

rough \_\_\_\_\_  
\_\_\_\_\_

versus fine orienteering. \_\_\_\_\_  
\_\_\_\_\_

7. Do the following:

(a) Take part in three orienteering events. One of these must be a cross-country course.\*

(b) After each event, write a report with (1) a copy of the master map and control description sheet, (2) a copy of the route you took on the course, (3) a discussion of how you could improve your time between control points, and (4) a list of your major weaknesses on this course. Describe what you could do to improve.

Event 1: \_\_\_\_\_

After each event, write a report with (1) a copy of the master map and control description sheet, (2) a copy of the route you took on the course,

(3) Discussion of how you could improve your time between control points, \_\_\_\_\_  
\_\_\_\_\_

and (4) a list of your major weaknesses on this course. \_\_\_\_\_  
\_\_\_\_\_

Describe what you could do to improve. \_\_\_\_\_  
\_\_\_\_\_

Event 2: \_\_\_\_\_

After each event, write a report with (1) a copy of the master map and control description sheet, (2) a copy of the route you took on the course,

(3) Discussion of how you could improve your time between control points, \_\_\_\_\_  
\_\_\_\_\_

and (4) a list of your major weaknesses on this course. \_\_\_\_\_  
\_\_\_\_\_

Describe what you could do to improve. \_\_\_\_\_  
\_\_\_\_\_

Event 3: \_\_\_\_\_

After each event, write a report with (1) a copy of the master map and control description sheet, (2) a copy of the route you took on the course,

(3) Discussion of how you could improve your time between control points, \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ and (4) a list of your major weaknesses on this course. \_\_\_\_\_

\_\_\_\_\_ Describe what you could do to improve. \_\_\_\_\_

8. Do ONE of the following:

- (a) Set up a cross-country course that is at least 2,000 meters long with at least five control markers.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Prepare the master map \_\_\_\_\_ and control description sheet. \_\_\_\_\_

- (b) Set up a score orienteering course with at least 12 control points and a time limit of at least 60 minutes. \_\_\_\_\_ Set point values for each control.

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Prepare the master map and control description sheet. \_\_\_\_\_

9. Act as an official during an orienteering event. This may be during the running of the course you set up for requirement 8. \_

10. Teach orienteering techniques to your patrol, troop, or crew. \_\_\_\_\_

\* Note to the Counselor: While orienteering is primarily an individual sport, BSA Youth Protection procedures call for using the buddy system. Requirement 7a can be completed by pairs or groups of Scouts.

**Online Resources** (Use any Internet resource with caution and only with your parent's or guardian's permission.)

Boy Scouts of America: ► [scouting.org](http://scouting.org) ► [Guide to Safe Scouting](#) ► [Age-Appropriate Guidelines](#) ► [Safe Swim Defense](#)  
 ► [Scout](#) ► [Tenderfoot](#) ► [Second Class](#) ► [First Class](#) ► [Rank Videos](#) ► [Safety Afloat](#)

Boy Scout Merit Badge Workbooks: [BSA Troop 780](#) -or- [usscouts.org](http://usscouts.org) -or- [meritbadge.org](http://meritbadge.org) Merit Badge Books:  
[www.scoutstuff.org](http://www.scoutstuff.org)

► [Leave No Trace](#) ► [Outdoor Code](#) ► [Wilderness Use Policy](#) ► [Youth Protection Training](#)

### Requirement Resources

1: **First Aid:** See [http://meritbadge.org/wiki/index.php/First\\_Aid](http://meritbadge.org/wiki/index.php/First_Aid) for these links and more:

[First Aid Videos: Basics](#) - [Basics2](#) [Wilderness First Aid](#) [CPR Basics](#) [Venomous Snake Bite](#) [First Aid Kits](#)

Other First Aid Links: [Mayo Clinic First Aid Guide](#) [Class 1 Exam](#) [Class 3](#) [Warning Signs of Cancer](#) - [Heart Disease](#)

3-4: **Map & Compass:** See <http://meritbadge.org/wiki/index.php/Orienteering> for these links and more:

Free Topographical Maps: <http://store.usgs.gov/>

Topozone.com: <http://www.topozone.com/> (free 8.5x11.)

Satellite, Street & Terrain: <http://maps.google.com/>

4c: Online Declination Calculator: <http://www.ngdc.noaa.gov/seg/geomag/jsp/Declination.jsp>

6a: International Control Descriptions: <http://www.fortnet.org/icd/>

6: 2004 Int'l Specification for Control Descriptions:

<http://www.orienteering.org/i3/index.php?/iof2006/content/download/830/3903/file/Control%20Descriptions%202004%20symbols%20only.pdf>

One Page Control Description Cheat Sheet (pdf): <http://www.floridaorienteering.org/tutorial/symbols.pdf>

6c: Better definitions than in the merit badge handbook: <http://www.teamqcar.com/articles/glossary.htm>

### General Resources

Canadian Orienteering Federation: <http://www.orienteering.ca> Intl. Orienteering Federation: <http://www.orienteering.org>

Geocaching.com: <http://www.geocaching.com/>

Geocaching to Promote Scouting: <http://www.scouting.org/boyscouts/supplemental/geocaching/index.html>

Orienteering Games for the Computer: <http://www.geocities.com/haywoodkb/o-game.html>

Schoolyard Compass Game: <http://www.iupui.edu/~geni/lsort/schoolyardcompass.doc>

Scout Skills Orienteering Badge UK: <http://www.scoutbase.org.uk/library/hqdocs/facts/pdfs/fs315058.pdf>

U.S. Geological Survey: <http://www.usgs.gov>

U.S. Orienteering Federation: <http://www.us.orienteering.org>

Equipment Sources: <http://www.aorienteering.com>

<http://www.thecompassstore.com>

<http://www.orienteeringunlimited.com>

<http://orienteer.com>