



Orienteering

Scouts BSA · Outdoors

Name

Started

Completed

Orienteering is finding your way across the land using a map and compass, and it can be a fun race too. You'll learn to read maps, measure your pace, and take part in real events. These skills make you a more confident hiker anywhere.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/orienteering/). Tips and examples are ideas, not extra requirements.

- ☐ **1** Show first aid for injuries you might get orienteering: blisters, cuts and scratches, tick bites, insect stings, snakebite, dehydration, and heat and cold problems (sunburn, heat exhaustion, heatstroke, hypothermia). Tell your counselor why you should recognize poisonous plants and animals near you

Tip: Learn how to treat sprains, blisters, cuts, and heat or cold problems you might face while out on a course.

- ☐ **2** Explain what orienteering is

Tip: Watch a short video of an orienteering event to see how it works.

3 Compass skills

Tips for this section: Practice taking bearings in your backyard or a park until finding your way feels natural.

Example for this section: In a park, pick three landmarks like a light pole, a bench, and a big tree. Take a bearing from one to the next, walk it while counting paces, and see how close you land. Then try a triangle course and see if you end where you started.

- ☐ **3a** Explain how a compass works and describe the parts of an orienteering compass

- ☐ **3b** Outdoors, demonstrate taking a bearing with a compass and then walking it

4 Topographic maps

Tips for this section: Get a topo map of a place you know and match the contour lines to the hills and valleys you've seen.

Example for this section: Get a topo map of a park you know. Find a hill by its circle of contour lines, a valley by its V shape pointing uphill, and look up the area's declination so you can explain how to adjust between map north and magnetic north.

- ☐ **4a** Explain how a topographic map shows the land's shape. Find and name five terrain features both on a map and outdoors

- ☐ **4b** Find 10 topographic map symbols and say what each one is

- ☐ **4c** Explain declination and why you have to account for it when using a map and compass together

- ☐ **4d** Show a topographic map that has magnetic north-south lines

- ☐ **4e** Show how to use an orienteering compass to measure distance on a map

- ☐ **4f** Show how to orient a map with a compass

- ☐ **5** Lay out a 100-meter pace course and find your walking pace and running pace over 100 meters. Explain why counting paces matters

Tip: Measure 100 meters on a field or track, walk it several times, and average your paces.

Example: Lay out 100 meters with a long tape or a track. Walk it three times counting every time your left foot lands, average the counts, then try it on a slope and in brush and note how your pace changes.

6 Control descriptions and techniques

Tips for this section: Make flash cards for control symbols and quiz a buddy.

- ☐ **6a** Identify 20 international control description symbols and tell what each one means

- ☐ **6b** Show a control description sheet and explain what its information tells you

- ☐ **6c** Explain each term and when you'd use it: handrail, catching feature, collecting feature, attack point, aiming off, contouring, reading ahead, relocation, and rough vs. fine orienteering

7 Orienteering events

Tips for this section: Look for events from a local orienteering club, and take notes after each one about what went well.

Example for this section: After each event, jot down your course, your time, a route choice that worked, and one mistake, like overshooting a control because you didn't use a catching feature. Bring all three reports to your counselor.

- ☐ **7a** Take part in three orienteering events, including at least one cross-country course. Following the buddy system, you may do this in pairs or groups

- ☐ **7b** After each event, write a report with: the master map and control description sheet, the route you took, ways you could have moved faster between controls, and your biggest weaknesses on that course. Describe what you could do to get better

8 Set up a course: Choose 1 of 2

Tips for this section: Start with a small course in a familiar park, and test it with a friend before others run it.

Example for this section: Set a cross-country course in a park you know: at least 2,000 meters with six to eight controls, a clear start and finish, and a mix of easy and tricky legs. Make the master map and control description sheet, have an experienced adult check it, then have a buddy run it before anyone else does.

- ☐ **8a** Set up a cross-country course of 2,000 meters or more with five or more control markers, and prepare its master map and control description sheet

- ☐ **8b** Set up a score course with 12 or more controls and a time limit no shorter than 60 minutes. Give each control a point value, and make the course's master map and control description sheet

- ☐ **9** Serve as an official at an orienteering event. It may be the event where your requirement 8 course is used

Tip: Ask a local club if you can help at the start, finish, or a control point.

- ☐ **10** Teach your patrol, troop, or crew some orienteering techniques

Tip: Plan a short, hands-on lesson and let your unit practice right away.

Example: Plan a 20-minute troop lesson on thumbing the map: show it, demonstrate it on a short leg, then send pairs out on a mini course in the parking lot or meeting-place grounds.