

First Class First Year: Map and Compass I



Map and Compass I

Learning Objectives

As a result of this experience, each participant should be able to:

Complete advancement requirements S1a, S1b.

Use a compass and understand basically how a compass and map can work together.

Materials Required

Several different types of maps (street maps, topographical maps). 1 compass and map for every participant.

Discovery

Play the Compass Game (No. R01005) or Beginner's Compass Game (No. R01004). Divide scouts into teams of two and then see how accurate they are with the compass. Make sure to help those scouts who have never used a compass before by giving a brief explanation.


Teaching-Learning

- I. The Compass (see *Boy Scout Handbook* page 66)
- II. Maps. (see *Boy Scout Handbook* page 67,68 & 69)
- III. Orienting the map: Show scouts how to orient the map and let each try to do it on his own.

Application:

Before anyone arrives, circle a set of points on each of the Scout's maps. Number the points on one of them in a circular pattern (this will be the 'master' map). Take degree readings from point to point, moving in a circular pattern (like an orienteering course). Write these down and instruct scouts to use the degree readings to number the points on their map. When everyone is done, give them the correct answers.

Map and Compass I



SECOND CLASS

Rank Requirements

Effective January 1, 2010

	Leader initial and date
<input checked="" type="checkbox"/> 1a. Demonstrate how a compass works and how to orient a map. Explain what map symbols mean. (Pages 354, 360–364)	
<input checked="" type="checkbox"/> 1b. Using a compass and a map together, take a five-mile hike (or 10 miles by bike) approved by your adult leader and your parent or guardian.* (Pages 365–366)	
<input type="checkbox"/> 2. Discuss the principles of Leave No Trace. (Pages 267–268)	
<input type="checkbox"/> 3a. Since joining, have participated in five separate troop/patrol activities (other than troop/patrol meetings), two of which included camping overnight. (Pages 444–445)	
<input type="checkbox"/> 3b. On one of those campouts, select your patrol site and sleep in a tent that you have pitched. Explain what factors you should consider when choosing a patrol site and where to pitch a tent. (Pages 249, 300–302)	
<input type="checkbox"/> 3c. Demonstrate proper care, sharpening, and use of the knife, saw, and ax, and describe when they should be used. (Pages 402–409)	
<input type="checkbox"/> 3d. Use the tools listed in requirement 3c to prepare tinder, kindling, and fuel for a cooking fire. (Pages 410–411)	
<input type="checkbox"/> 3e. Discuss when it is appropriate to use a cooking fire and a lightweight stove. Discuss the safety procedures for using both. (Page 325)	
<input type="checkbox"/> 3f. In an approved place and at an approved time, demonstrate how to build a fire and set up a lightweight stove. Note: Lighting the fire is not required. (Pages 410–415)	
<input type="checkbox"/> 3g. On one campout, plan and cook one hot breakfast or lunch, selecting foods from the food guide pyramid. Explain the importance of good nutrition. Tell how to transport, store, and prepare the foods you selected. (Pages 102, 316, 320–323, 326, 329, 330)	
<input type="checkbox"/> 4. Participate in a flag ceremony for your school, religious institution, chartered organization, community, or troop activity. Explain to your leader what respect is due the flag of the United States. (Pages 72–76)	
<input type="checkbox"/> 5. Participate in an approved (minimum of one hour) service project. (Pages 84–85)	

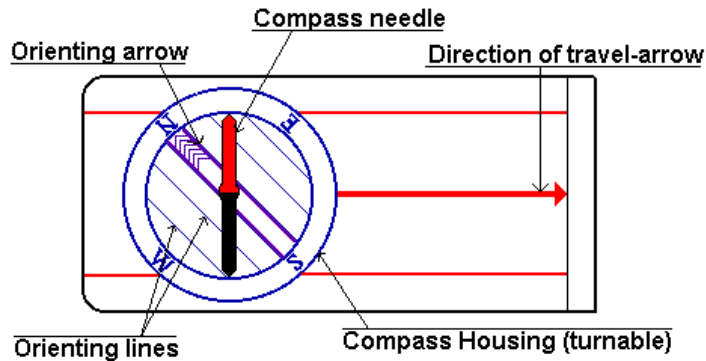
*If you use a wheelchair or crutches, or if it is difficult for you to get around, you may substitute "trip" for "hike."

Downloadable requirements checklists for all ranks and videos to guide you through the Second Class rank requirements may be found on the Handbook Web site, www.bsahandbook.org.

<input type="checkbox"/> 6. Identify or show evidence of at least 10 kinds of wild animals (birds, mammals, reptiles, fish, mollusks) found in your community. (Pages 229, 231)	
<input type="checkbox"/> 7a. Show what to do for "hurry" cases of stopped breathing, serious bleeding, and ingested poisoning. (Pages 162–170)	
<input type="checkbox"/> 7b. Prepare a personal first-aid kit to take with you on a hike. (Page 127)	
<input type="checkbox"/> 7c. Demonstrate first aid for the following: <ul style="list-style-type: none"> • Object in the eye (Page 44) • Bite of a suspected rabid animal (Page 140) • Puncture wounds from a splinter, nail, and fishhook (Pages 145–146) • Serious burns (partial thickness, or second-degree) (Pages 148–149) • Heat exhaustion (Page 150) • Shock (Pages 170–171) • Heatstroke, dehydration, hypothermia, and hyperventilation (Pages 147–148, 151–152) 	
<input type="checkbox"/> 8a. Tell what precautions must be taken for a safe swim. (Page 182)	
<input type="checkbox"/> 8b. Demonstrate your ability to jump feetfirst into water over your head in depth, level off and swim 25 feet on the surface, stop, turn sharply, resume swimming, then return to your starting place. (Pages 190–191)	
<input type="checkbox"/> 8c. Demonstrate water rescue methods by reaching with your arm or leg, by reaching with a suitable object, and by throwing lines and objects. Explain why swimming rescues should not be attempted when a reaching or throwing rescue is possible, and explain why and how a rescue swimmer should avoid contact with the victim. (Pages 196–199)	
<input type="checkbox"/> 9a. Participate in a school, community, or troop program on the dangers of using drugs, alcohol, and tobacco and other practices that could be harmful to your health. Discuss your participation in the program with your family, and explain the dangers of substance addictions. (Pages 113–117)	
<input type="checkbox"/> 9b. Explain the three R's of personal safety and protection. (Page 69)	
<input type="checkbox"/> 10. Earn an amount of money agreed upon by you and your parent, then save at least 50 percent of that money. (Page 26)	
<input type="checkbox"/> 11. Demonstrate Scout spirit by living the Scout Oath (Promise) and Scout Law in your everyday life. Discuss four specific examples (different from those used for Tenderfoot requirement 13) of how you have lived the points of the Scout Law in your daily life. (Page 30)	
<input type="checkbox"/> 12. Participate in a Scoutmaster conference. (Page 34)	
<input type="checkbox"/> 13. Complete your board of review. (Page 55)	

NOTE: Alternate requirements for the Second Class rank are available for Scouts with physical or mental disabilities if they meet the criteria listed in the Boy Scout Requirements book.

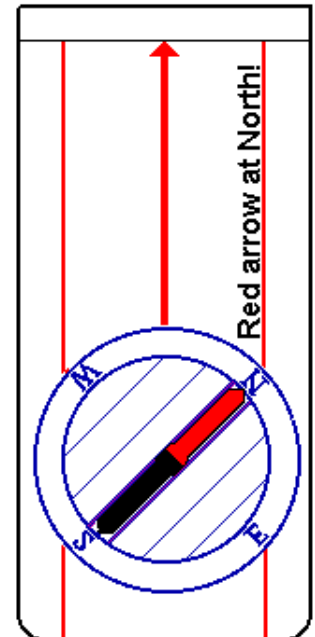
Second Class 1a – Orienteering a Map



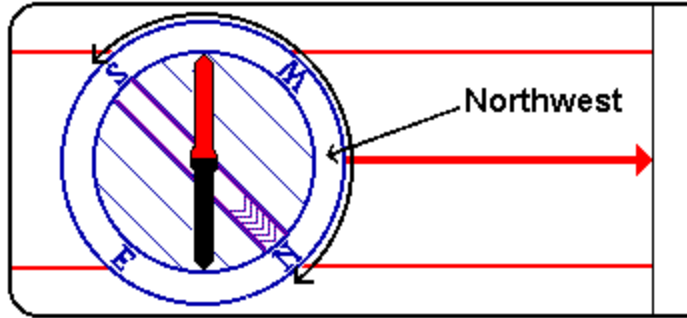
The red and black arrow is called the *compass needle*. On some compasses it might be red and white, but the point is, **the red part of it is always pointing towards the earth's magnetic north pole.**

If you don't want to go north, but a different direction use the Compass housing. You've got this turnable thing on your compass. We call it the *Compass housing*. On the edge of the compass housing, you will probably have a scale. From 0 to 360 or from 0 to 400. Those are the degrees or the *azimuth* (or you may also call it the bearing in some contexts). And you should have the letters N, S, W and E for North, South, West and East. If you want to go in a direction between two of these, you would combine them. If you would like to go in a direction just between North and West, you simply say: "I would like to go Northwest " Find out where on the compass housing northwest is. Then turn the compass housing so that northwest on the housing comes exactly there where the large *direction of travel-arrow* meets the housing.

Hold the compass in your hand. And you'll have to hold it quite flat, so that the compass needle can turn. Then turn yourself, your hand, the entire compass, just make sure the compass housing doesn't turn, and turn it until the compass needle is aligned with the lines inside the compass housing.



Second Class 1a - Compass



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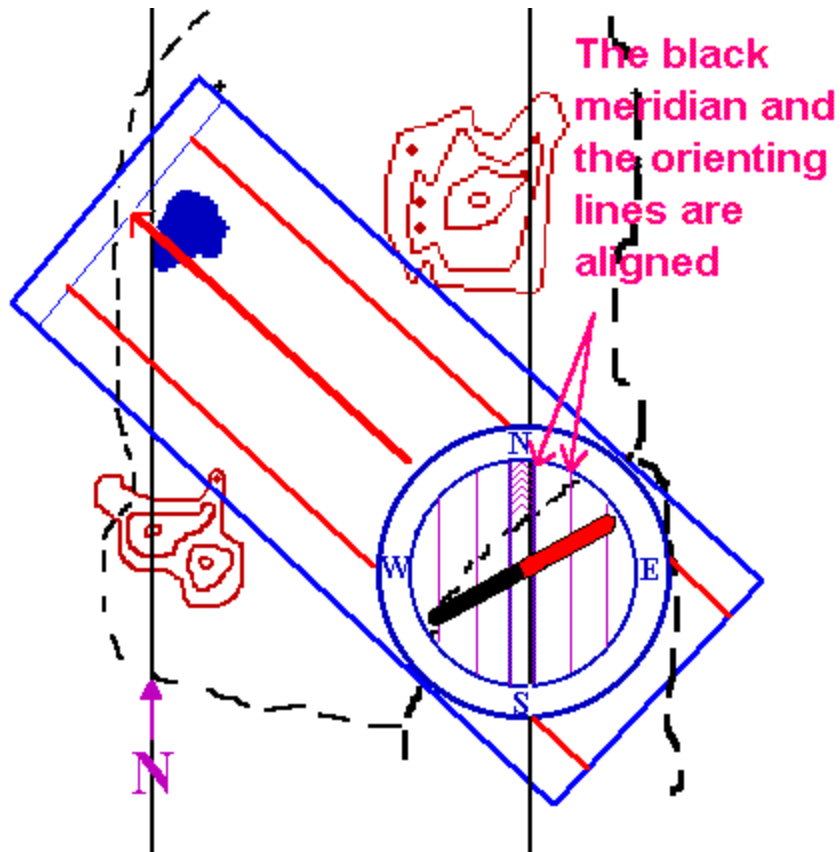
If you don't want to go north, but a different direction use the Compass housing.

You've got this turnable thing on your compass. We call it the *Compass housing*. On the edge of the compass housing, you will probably have a scale. From 0 to 360 or from 0 to 400. Those are the degrees or the *azimuth* (or you may also call it the bearing in some contexts). And you should have the letters N, S, W and E for North, South, West and East. If you want to go in a direction between two of these, you would combine them. If you would like to go in a direction just between North and West, you simply say: "*I would like to go Northwest* "

Find out where on the compass housing northwest is. Then turn the compass housing so that northwest on the housing comes exactly there where the large *direction of travel-arrow* meets the housing.

Hold the compass in your hand. And you'll have to hold it quite flat, so that the compass needle can turn. Then turn yourself, your hand, the entire compass, just make sure the compass housing doesn't turn, and turn it until the compass needle is aligned with the lines inside the compass housing.

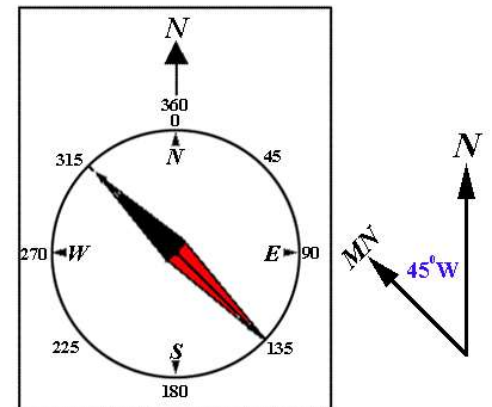
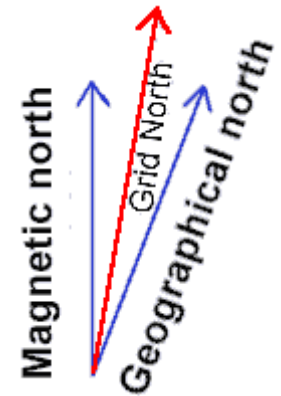
Second Class 1a – Orienteering a Map



In traveling from Point A to Point B on a map, place the compass on the map so that an edge of the compass that is parallel to the direction of travel arrow on Point A. Line the edge up so that it also crosses Point B. If the distance is too great, draw a line between both Points and place the edge of the compass on this line. While you have the edge of the compass carefully aligned from A to B, turn the compass housing so that the orienting lines in the compass housing are aligned with the meridian lines on the map (lines going north and south). Finally, turn the entire map and compass together so that the compass needle is pointing North.

Second Class 1a – Magnetic Declination

The compass is pointing towards the *magnetic* north pole, and the map is pointing towards the *geographic* north pole. The magnetic *declination* is the difference between the two norths. The declination will be given on the map. When you look at the figure, the declination is the amount added to or subtracted from the magnetic north pole. If the declination is to the right, or to the east, add the declination, subtract if the declination is to the left and west. Like a curved row of numbers, when something is more than zero you'll **subtract** to get it back to zero. And if it is less, you'll **add**. You can correct for magnetic declination by turning the compass housing, according to the numbers on the housing.



Second Class 1a – Map Symbols



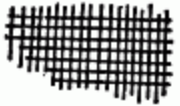
Camp



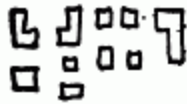
P.O.
Post Office



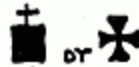
T.O.
Telegraph
Office



City, Town or
Village



Buildings



Church



School



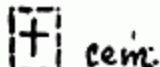
W.W.
Water
Works



Hos.
Hospital



Windmill



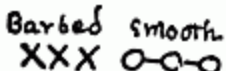
cem.
Cemetery



Ruins



Fence
(any or board)



Barbed Smooth
Wire Fence



Stone
Fence



Wagon
Road
(good)



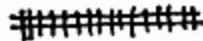
Footpath or
Trail



Wagon
Road
(unfenced).



Railroad
Station



Double Track
R.R.



Trolley
Line

Second Class 1a – Map Colors

Black. Indicates cultural (man-made) features such as buildings and roads, surveyed spot elevations, and all labels.

Red-Brown. The colors red and brown are combined to identify cultural features, all relief features, non-surveyed spot elevations, and elevation, such as contour lines on red-light readable maps.

Blue. Identifies hydrography or water features such as lakes, swamps, rivers, and drainage.

Green. Identifies vegetation with military significance, such as woods, orchards, and vineyards.

Brown. Identifies all relief features and elevation, such as contours on older edition maps, and cultivated land on red-light readable maps.

Red. Classifies cultural features, such as populated areas, main roads, and boundaries, on older maps.

Other. Occasionally other colors may be used to show special information. These are indicated in the marginal information as a rule.

Second Class 1b

Homework

Using a compass and a map together, take a five-mile hike (or 10 miles by bike) approved by your adult leader and your parent or guardian. (Note: If you use a wheelchair or crutches, or if it is difficult for you to get around, you may substitute "trip" for "hike.")