

MAP READING

General

Each club may enter one team consisting of 8 cadets.

Each END ZONE at one end of the gym will have a compass, ruler, pencils, 2 blue push pins, 2 red push pins, a map, map symbol matching squares, and 8 Flash cards.

Each cadet, in his turn, runs to the END ZONE. The 1st boy is to pick up a Map Symbol and match the Map Symbol with its description. He is to then take a flash card and complete its' instructions. After both stages of his turn are complete, the boy returns to his team to tag the next boy in line. (Contact of the hands must be made). The timers will stop the timing when the last boy raises his hand indicating that the map is pointing to Magnetic North.

The Judge will determine the last boy to run.

Points

Correct city	4 points (1 for each correct answer)
Correct distance	2 points (1 for each correct answer)
Correct degree reading	1 points (showing 'Magnetic North')
Correct scale	1 point (1 for having the correct scale)
Correct map symbol name	8 points (1 for each correct answer)

Max points

16

Penalties

- 30 second penalty for false start (leaving starting line either before "GO" is shouted or whistle blown, or leaving starting line before tagged by returning cadet, or stepping over foul line)
- 15 second penalty for each incorrect answer
- 30 second penalty for correcting someone else's incorrect pin placement or map symbol.
- If the cadet notices that the map symbol is in the wrong place, simply place the correct piece over top of the incorrect one.

The team with the most points wins.

Ties are broken with time.

The team with the fastest time (after penalties have been added) wins the tie-breaker. (See attached judging sheet)

Flash Cards (*sample only*):

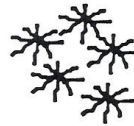
<p>Write Down the Scale of the Map.</p> <p>Scale: _____</p>	<p>Locate City C with a Red Pin</p> <p>City C: <u>Ottawa</u></p>
<p>Locate City A with a Blue Pin</p> <p>City A: <u>Barrie</u></p>	<p>Locate City D with a Red Pin</p> <p>City D: <u>Chatham</u></p>
<p>Locate City B with a Blue Pin</p> <p>City B: <u>Thunder Bay</u></p>	<p>Use the Distance Triangle to find the distance from City C to City D.</p> <p>City C: <u>Ottawa</u> City D: <u>Chatham</u></p> <p>Distance: _____ km</p>
<p>Use the Distance Triangle to find the distance from City A to City B.</p> <p>City A: <u>Barrie</u> City B: <u>Thunder Bay</u></p> <p>Distance: _____ km</p>	<p>Use the compass and point the map to:</p> <p><u>Magnetic North</u></p>

Map Symbols

Map Orienteering - map symbols



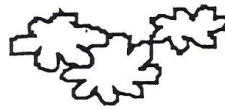
Buildings



Pine Woods



Church



Broad Leaf Woods



School



Good Road



River Stream



Poor Road



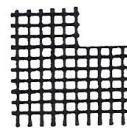
Lake



Trail



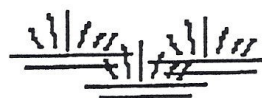
Bridge



Town



Railroad



Grass Lands

Distance Triangle

How to Find Distance using the Distance Triangle?

- Find City A (Example - Bellville)
- Find City B (Example - Chatham)
- Take City A's line to the right
- Take City B's line up
- Where they meet is the distance between the two cities – **470 km**

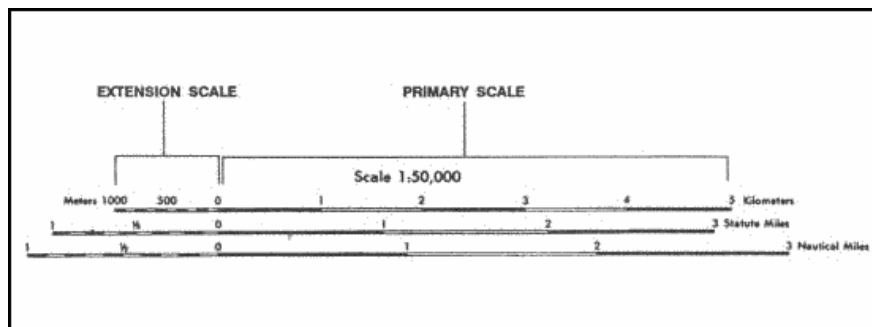
Sample Distance Triangle

Barrie	260	455	190	405	730	370	630
	Bellville	665	290	155	940	470	780
		Blind River	630	710	245	805	540
			Brantford	420	860	195	805
				Brockville	985	615	800
					Chapleau	1050	285
						Chatham	980
							Cochrane

Note: The distances are based on each location's city hall and are rounded to the nearest 5 kilometers. They are intended for quick reference only.

Scale

A graphic scale is a ruler printed on the map and is used to convert distances on the map to actual ground distances. The graphic scale is divided into two parts. To the right of the zero, the scale is marked in full units of measure and is called the primary scale. To the left of the zero, the scale is divided into tenths and is called the extension scale. Most maps have three or more graphic scales, each using a different unit of measure. When using the graphic scale, be sure to use the correct scale for the unit of measure desired.



Sample Score Sheet

Map Reading 2011

Club Name	Guelph 5529 Team A	Judge 1	Ron Wiersma
		Judge 2	Fred Nyland

Cadet	Description	Correct	Incorrect	False Start
1	Correct Map Symbol	√		√
	Correct Map Scale		√	
2	Correct Map Symbol	√		
	Correct Pin Placement (City A)	√		
3	Correct Map Symbol		√	
	Correct Pin Placement (City B)	√		
4	Correct Map Symbol		√	
	Correct Distance (City A to B)		√	
5	Correct Map Symbol	√		
	Correct Pin Placement (City C)	√		√
6	Correct Map Symbol		√	
	Correct Pin Placement (City D)	√		
7	Correct Map Symbol	√		
	Correct Distance (City C to D)	√		
8	Correct Map Symbol	√		
	Correct Direction of Map	√		

Judge 1 – Time of Relay	2:25:25	60	60
Judge 2 – Time of Relay	2:26:25	60	60
Total Points	11/16		
Total Time (incl. Penalties)	4:25:25		