## COMPASSES

## AN INSTANT MEETING FOR GUIDES FROM THE BC CAMPING COMMITTEE

Working with compasses provides girls with many learning experiences. Age appropriate activities allow them to develop their navigational skills while being challenged, but still having fun. The key to success in this area is explaining the basic concepts clearly, and repeating them often with a variety of games and activities.

## Guides

$\square$ Learn to set a compass and follow a given bearing.
$\square$ Practice sighting on a distant object.
$\square$ Follow a pre-set trail using a compass (e.g. walk 23 paces at a bearing of 117 degrees). The trail should be fairly simple, without obstacles between stations, to prevent the need for sighting on intermediate objects.

## Meeting Plan

Before the meeting: Have a leader pre-set one or more trails and record the compass directions for the girls to follow.

5-10 min: Gathering: Compass Rose
$5 \mathrm{~min}: \quad$ Guide Opening
$10 \mathrm{~min}: \quad$ The Wedding Story
10 min: Direction Elimination
10-20 min: Compass Use - Theory
5-10min: Red Fred in the Shed
20 min: Compass Use - Practice
5-10 min: Cardinal Points
20-30 min: Follow the Trail
5 min: Guide Closing
120 minute meeting. Approximate activity times shown.

## Meeting Supplies

| $\square$ printed colouring | $\square$ direction signs: N, E, | $\square$ directions for Cardinal |
| :--- | :--- | :--- |
| resources | S, W, NE, NW, SE, | Points activity |
| $\square$ pencils, crayons, | SW) | $\square$ trail directions |
| markers | $\square$ blindfold |  |
| $\square$ compasses | $\square$ bean bags |  |

## Compass Information

The red end of the compass needle points to the magnet North Pole.
Points on the Compass

$$
\begin{aligned}
& N=360 \text { degrees } N E=45 \text { degrees } \\
& E=45 \text { degrees } S E=135 \text { degrees } \\
& S=180 \text { degrees } S W=125 \text { degrees } \\
& W=270 \text { degrees } N W=315 \text { degrees }
\end{aligned}
$$

## How to Use a Compass

TO TAKE A BEARING IN THE FIELD

1. Hold compass level, in front of you, and point direction-of-travel line at desired object.
2. Rotate compass housing to align pointed end of declination arrow with red end of magnetic needle (red in the shed).
3. Read bearing at index line.

## TO FOLLOW A BEARING IN THE FIELD

1. Set desired bearing at index line.
2. Hold compass level, in front of you, and turn your entire body, including your feet, until red end of magnetic needle is aligned with pointed end of declination arrow (red in the shed).
3. Travel in the direction shown by the direction-of-travel arrow.

Note: Never store your compasses in a metal container or stacked together (think of the magnet!)

## Gathering: Compass Rose

## Directions

Download a variety of resources from the Internet:
https://www.google.ca/\#q=compass+rose+activity+sheets

## Supplies

$\square$ printed resources
$\square$ pencils, crayons, markers
$\qquad$


## The Wedding Story

Get some energy out and start thinking about the directions of a compass. Put signs around your space with "N", "E", "S", and "W", "NE", "SE", "SW", and "NW". For more advanced girls, just point out which sides of the room will be each direction.

## Supplies

$\square$ directions signs: N,E,S,W, NE,NW,SE,SW

## Directions

Read the following story and during the story, when directions are read out, have the girls run to the direction point of the compass. When "world" is read out, the girls come back to the middle. Allow time for the girls to get there safety before moving on.

## The Wedding

A big important wedding is being held this year. The daughter of King NORTH is being married to the son of King SOUTH. It is going to be a very grand affair with guests from all parts of the WORLD.

From the land of the rising sun, the Emperor of the EAST and his wife, the Empress, and from the other side of the WORLD, King and Queen WEST with the little Prince NORTHEAST and the Princess SOUTHWEST. The bridegroom, son of King SOUTH, has invited his cousin SOUTHEAST to be the best man. The bride, daughter of King NORTH, has asked her best friend, NORTHEAST, who is also a cousin of SOUTHEAST, to be Maid of Honor.

The Queen of the NORTH was very busy trying to find places for the visitors from all over the WORLD to stay. The Emperor EAST and his wife the Empress EAST had brought so many servants to wait on them, that the little town was beginning to be very overcrowded. To add to the confusion, King and Queen WEST had brought so much luggage that it took 3 wagons to haul it to the NORTH palace. Queen NORTH looked quite worried; where in the WORLD was she to put it all?

In the last wagon, Prince NORTHWEST and Princess SOUTHWEST had put all their pets which they couldn't bear to leave behind. They had four SOUTHWEST cats, four big dogs (which came from the other side of the WORLD), and a cow and a goat from the EAST. The cousins SOUTHEAST and NORTHEAST thought they were very odd things to bring halfway across the WORLD to a wedding.

At last the great day dawned, beautiful and sunny. The procession started to go to the NORTH Cathedral from NORTH Palace, and people from all over the WORLD cheered. After the ceremony in NORTH Cathedral, the procession returned to the NORTH Palace for the wedding breakfast. First came King NORTH, with Queen SOUTH on his arm. Next came King SOUTH with Queen NORTH. Following then came King and Queen WEST, with Prince NORTHWEST and Princess SOUTHWEST. Looking very grand in their silk robes were the Emperor of the EAST and the Empress of the EAST. The guests from this part of the WORLD came next. Cousins SOUTHEAST and NORTHEAST then appeared. Then came the moment the whole WORLD had been waiting for. The beautiful bride, daughter of king NORTH, and the handsome bridegroom, son of King SOUTH, were standing in the doorway. Guests from all over the WORLD threw confetti and rice as they ran down the steps to the famous NORTH glass coach.
After the wedding breakfast at NORTH Palace, the bride and groom left on their honeymoon around the WORLD. Prince NORTHWEST had tied an old boot on the back of the car, and Princess SOUTHWEST had printed "Just Married" on the front. The whole WORLD laughed and cheered and waved good-bye and good luck, along with Prince NORTHWEST, Princess SOUTHWEST, Cousins NORTHEAST and SOUTHEAST, Emperor and Empress EAST, King and Queen SOUTH, and finally King and Queen NORTH.

## Direction Elimination

## Directions

1. Have on person "IT". She stands in the middle of the room with eyes closed or blindfolded and counts to 10 (or longer if you have a lot of space).

## Supplies

$\square$ optional: blindfold
$\square$ direction signs
2. The girls run around the room to any sign/direction.
3. "IT" then yells out a direction. Anyone who is standing at the direction she called (example North) is then out.
4. The game continues until on girl is left standing.
*Adapt this game to your unit's needs.

## Compass Use - Theory

Always go over the parts of a compass first, even with a group that has tried compasses before.

## Supplies <br> - compasses

## Directions

1. Hold the compass flat in your hand. Turn your whole body around in a circle as you watch the compass. What do you notice? The needle in the middle seems to move. Now try holding still and turning the compass slowly in your hand, leaving it flat. The needle seems to want to keep pointing in one direction as the compass turns around it. Depending on the age of the group, you may need to stop and discuss where north is and what magnets are.
2. Here's the part that they will all remember - when using a compass in the real world, remember to put Red Fred in the Shed. The red end of the magnetic needle, which points to north, is Red Fred. The orienting arrow, which is drawn on the bottom of the compass and turns with the housing, is the Shed.
3. Remind them that when walking paces it is just a regular walking step.
4. Remember all girls learn differently so it is best to have a teaching compass (could be an example of a compass made from construction paper) or compasses for each girl to learn on.
5. Have the girls all find the basic directions plus the intercardinal directions. (Leaders to check that all girls are finding the basic directions correctly. If not, provide some one-on-one teaching). For advanced compass users, have them find degrees. Remember to challenge them but not to overwhelm them.

## Red Fred in the Shed

Try this activity to demonstrate the importance of your starting point.

## Directions

1. Place an object, such as a red stuffed animal, a chair,

## Supplies

compasses
$\square$ optional: red stuffed animal a rock or a tree (at the park) into the middle of your space. Have the girls form a circle around the object.
2. Have everyone keep still and turn the housing of the compass until Red Fred is in the Shed.
3. Now have everyone read off their numbers. Girls might be tempted to give the same number like their friends' because their number is different. But all the numbers are supposed to be different. Compasses only tell you which direction to go relative to a starting point.

## Compass Use - Practice

Do this activity in a large space - either outdoors or in a large meeting space.

## Directions

1. Divide the girls into groups of 4 . Each girl becomes one

## Supplies

$\square$ compasses
$\square$ beanbags direction ("N", "E", "S", and "W"). Each group receives one compass and one beanbag.
2. One girl from each team throws the beanbag as far as she can in her assigned direction. The team then runs to find the beanbag. The second girl then sets the compass in the spot where the beanbag was found, stands to face her given direction and throws the beanbag. The game continues in this way.
3. Make sure leaders are circulating to ensure that the girls are using their compass properly. Each girl should have at least 2-3 turns before moving onto the next activity.

## Cardinal Points

Do this activity in a large space - either outdoors or in a large meeting space.

## Directions

1. To be done individually or in small groups of 2-3. Each girl/group needs something to mark their starting spot

## Supplies

$\square$ compasses
$\square$ something to mark points with (rock, etc.)
$\square$ printed directions with and a compass.
2. Each girl/group selects a starting point and places a marker (water bottle, rock, etc.). They then follow these instructions: (print the directions, enough for each girl/group)

## Walk 5 paces to the north, stop

Walk 10 paces to the West, stop
Walk 20 paces to the south, stop
Walk 15 paces to the east, stop
Walk 15 paces to the north, stop
Walk 5 paces to the west, stop. At this point, look down on the ground. Where are you? (Girls should be back at their starting point.)

## Follow the Trail

Have a leader pre-set one or more trails for the girls to follow.

## Directions

## Supplies

$\square$ compasses
$\square$ trail directions

1. Divide the girls into in small groups of 2-4 girls.
2. Make sure each group has one or more compasses and provide them with a starting point and directions.
