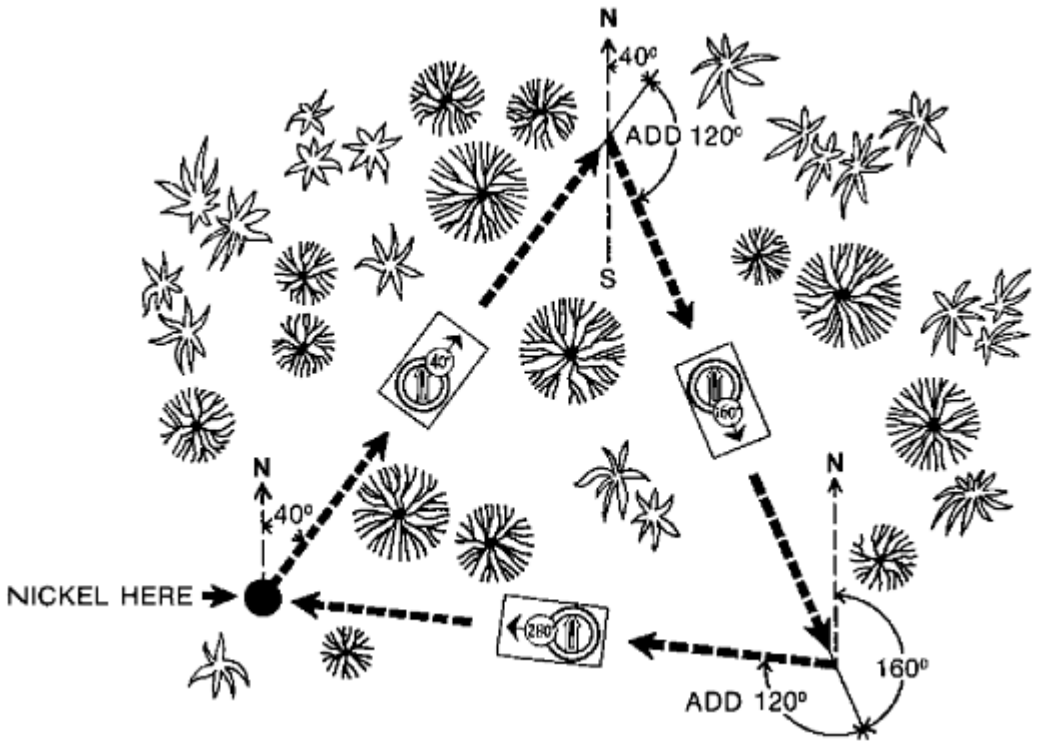
Three-Legged Compass Walk

Purpose: Practice in taking degree bearings and following them.

Make up 10 markers, number them 1 to 10. Pass out the numbered markers corresponding to the group numbers on the instructions for each group. Students should understand how to take bearings with a compass. Remind them to choose something in their line of sight when they have their bearing and look at that item (ie-a tree) as they walk the instructed number of steps, as opposed to staring at the compass in their hand.

Scatter the participants over a field with fairly tall grass, or in a wooded area with a fair amount of underbrush. Each participant or group places a marker at the feet of the participant who will be counting the steps. On a signal, each participant takes the first bearing and walks the first distance, then stops. When all have stopped, give the next signal. Each takes the second bearing indicated on his card, walks the second distance, stops. On the third signal, all each walks the third distance at the third bearing. On the fourth and final signal, all participants bend down and pick up their marker, which should be lying at their feet, or at least within a step or two, if the compass walking has been done correctly. For added competition, measure the distance from the participant who walked the bearings (the front of their right shoe) to the marker and see who was the closest to their marker.

Note: Each participant or group will be walking an equilateral triangle. Bearings for 10 different participants/groups are listed below. However, you can make as many sets of instruction cards as you need by using any bearing to start. To get the next bearing add 120^{o} to the previous bearing. If at any time you get a sum greater than 360^{o}, subtract 360^{o} from the sum. You need three bearings and the steps for each bearing needs to be the same.



Example: 15 steps at **45 °**
15 steps at 45 + 120 = **165 °**
15 steps at 165 + 120 = **285 °**

Example: 18 steps at **250 °**
18 steps at 250 + 120 = 370 – 360 = **10 °**
18 steps at 10 + 120 = **130 °**

Instructions Cards

GROUP # 1

20 steps at 90^{o}
20 steps at 210 ^{o}
20 steps at 330 ^{o}

GROUP # 2

25 steps at 45 ^{o}
25 steps at 165 ^{o}
25 steps at 285 ^{o}

GROUP # 3

20 steps at 30 ^{o}
20 steps at 150 ^{o}
20 steps at 270 ^{o}

GROUP # 4

25 steps at 60 ^{o}
25 steps at 180 ^{o}
25 steps at 300 ^{o}

GROUP # 5

20 steps at 70 ^{o}
20 steps at 190 ^{o}
20 steps at 310 ^{o}

GROUP # 6

25 steps at 100 ^{o}
25 steps at 220 ^{o}
25 steps at 340 ^{o}

GROUP # 7

20 steps at 225 ^{o}
20 steps at 345 ^{o}
20 steps at 105 ^{o}

GROUP # 8

25 steps at 150 ^{o}
25 steps at 270 ^{o}
25 steps at 30 ^{o}

GROUP # 9

20 steps at 300 ^{o}
20 steps at 60 ^{o}
20 steps at 180 ^{o}

GROUP # 10

25 steps at 245 ^{o}
25 steps at 5 ^{o}
25 steps at 125 ^{o}