

Print these two slides, cut out parts, and glue them on cardboard to make a demo compass. One copy of this slide for the background and another copy for the needle.



Cut out the dial from this slide. Drill a hole and use a rivet so the dial and needle can be turned independently

T5,9 Rules of Safe Hiking

Hike with a buddy (why?). Wear good shoes.

Hike single file on left side of road.

Wear highly visible clothes.

Never hitchhike.

Stay on trail, away from dangerous terrain.

Know where you are, use map & compass.

Watch for landmarks, ahead & behind.

Lost? STOP: Stay calm, Think, Observe, Plan.

Still Lost? Stay put.

Three signals. Make smokey fire.

Be visible. Stay warm & dry.

S1a: Compass & Map

Compass.

Points North.

Measures direction (or bearing)

Example N 15° W, or N 130° E or just 130°

Helps orient a map.

What direction is 0°, 90°, 180°, 270°

Map.

Find North arrow on map.

Orient: turn map so North arrow points north.

Symbols: show features and landmarks.

Legend: defines the symbols.

Scale: shows map distances.

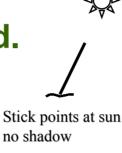
Get bearings using map and compass.

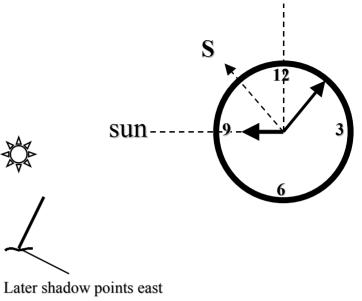
F1: Day/Night Directions

Day - use the sun

Wrist - Watch method.

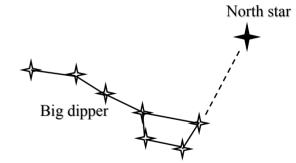
Shadow - Stick method.





Night - moon and stars

North Star



Moon

rises in east, sets in west. Use shadow-stick & wrist-watch methods.

Constellations

F2: Orienteering

Dead Reckoning

20° for 400 feet to large rock, then 80° for 100 feet to fork in road, then ... First find out how many paces in 50 feet.

Test: Use compass to follow a course

20° for 50 feet, then 206° for 50 feet, then 130° for 50 feet to the candy.

Test: Use map and compass

Get bearings from map points.

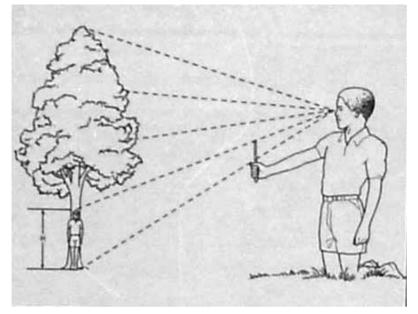
Get distances from map.

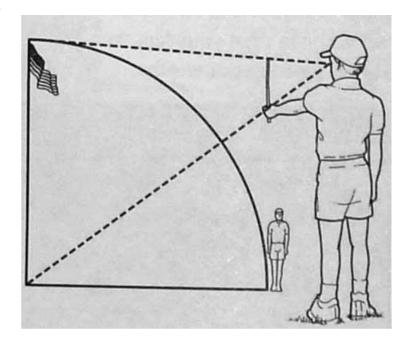
Write down the course.

Use compass to follow the course

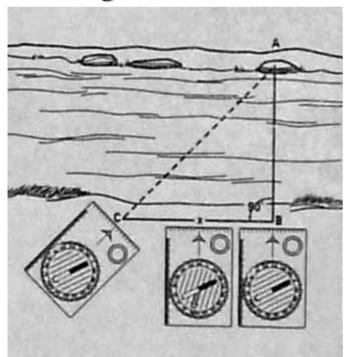
Measuring Height

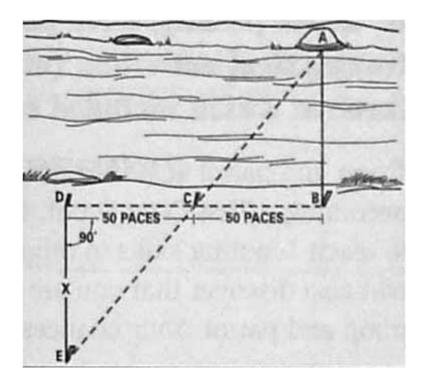
F2

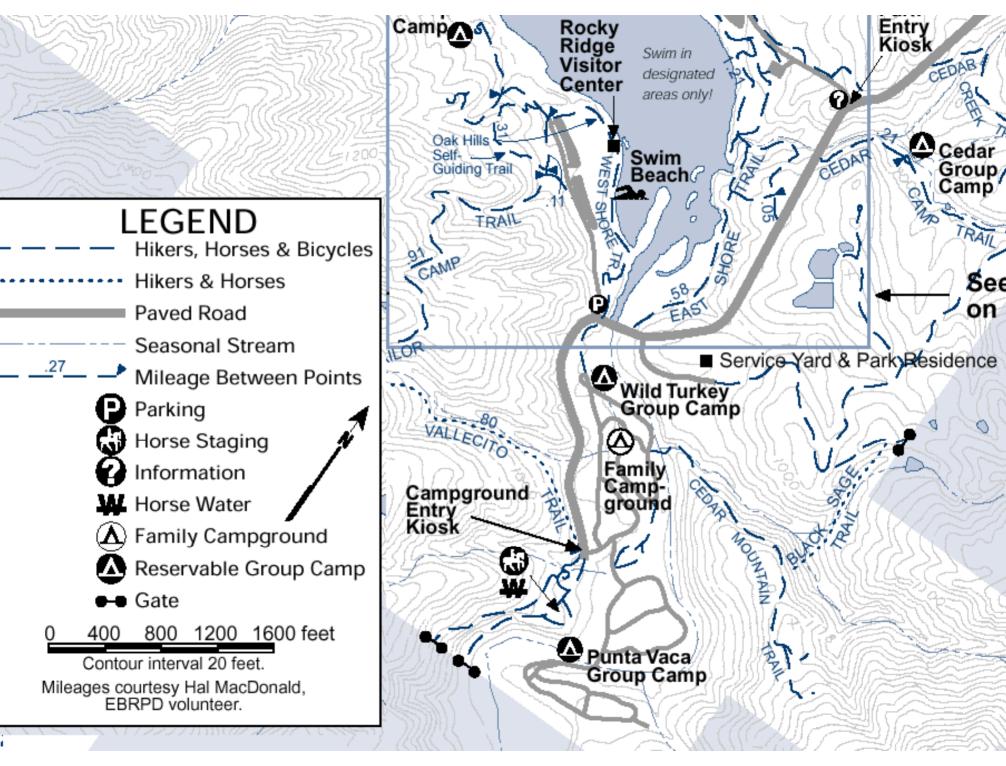


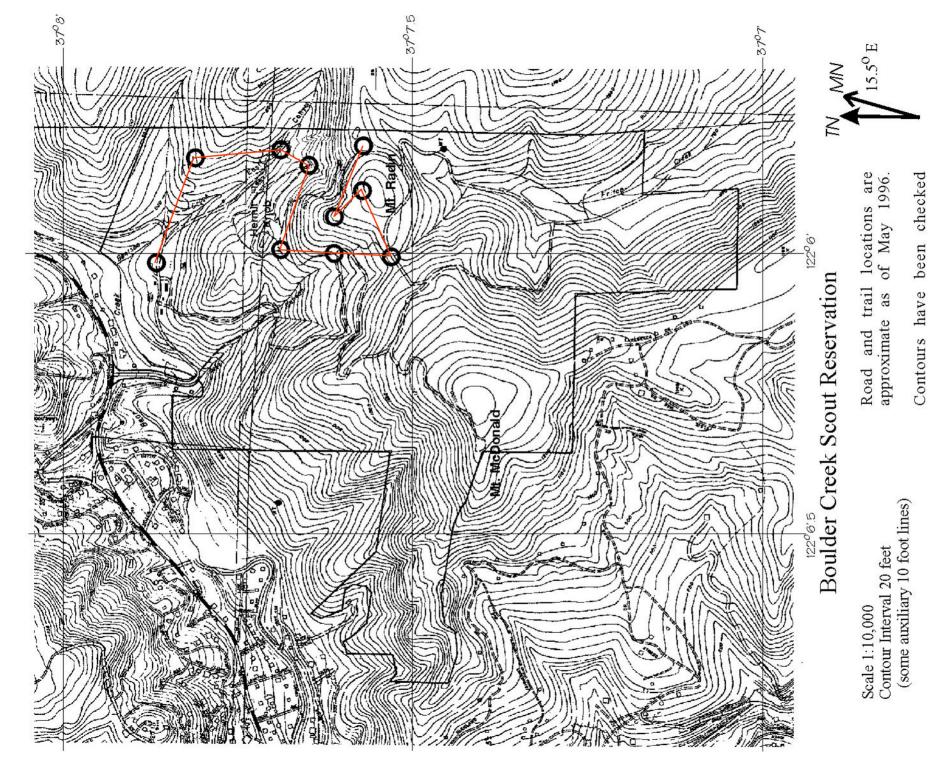


Measuring Width









deviations

are known

but there

particularly in the East Canyon area.

and actual

between map

Boulder Creek Scout Reservation: Orienteering Course

This is a tough course for 11-13 year old boys. Use the topo map and the following bearings and features. All bearings are from magnetic north, distances are in meters. Red markers are 4" square red/white triangles.

Start the course at the flag poles near the archery range.

76° for 130m	to rough dirt steps on north side of a bridge
104° for 200m	to red marker on redwood stump, just left of the ridge line
158° for 210m	to big bridge near water tanks
130° for 75m	to red marker on dead stump
228° for 100m	to red marker on small tree at trail turn; nature trail 20, right of big rock, on small tree
337° for 30m	to bend in trail with exposed roots
268° for 70m	to bend in trail
132° for 25m	to bend in trail
290° for 19m	to bend in trail
172° for 30m	to nature trail 22

238° for 80m	to red marker on upright standing sign tree.
180° for 140m	to red marker
161° for 150m	to red marker on tree by trail
48° for 200m	to huge redwood with metal tag just northeast of Mt. Radin peak
306° for 100m	to red marker on tree with #5 sign, on ridge line near point of knoll
90° for 200m	to red marker on small oak on ridge trust your compass. This one is much easier if you use the map and plot a less difficult path.

Hints:

Rough terrain. Set bearing, select a target feature and walk there trying to estimate the distance. Then take another bearing and locate another target. Sometimes you will have to move far from the straight line path. Try to remember how far and then get back to it later. Distances are approximate. Use the topographical map to help locate terrain features. The circles on the map are the red marker locations numbered in sequence.