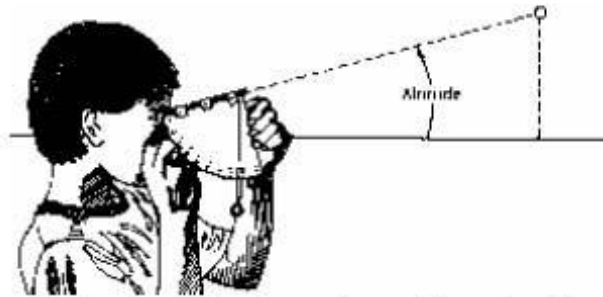


MAKE YOUR OWN QUADRANT



Christopher Columbus used a quadrant just like the one shown here!

To Make Your Quadrant, You Will

Need □ • The quadrant pattern □ • Light Weight Cardboard □ • Scissors □ • Paper Punch (optional) □ • Tape □ • A Drinking Straw □ • String □ • A Weight □ • Glue

Step #1 Glue the page with the quadrant pattern to a piece of light weight cardboard. Then cut out the quadrant pattern.

Step #2 Use your scissors or paper punch to cut out a little notch at each of the lines marked along the curved edge of your quadrant.

Step #3 Cut your drinking straw to the same length as the side of your quadrant that is marked .“attach straw along this edge..” Tape the straw along that edge!

Step #4 Carefully poke a small hole through the small black circle in the corner of your quadrant. Put a piece of string through this hole, and tape the string to the blank side of the cardboard.

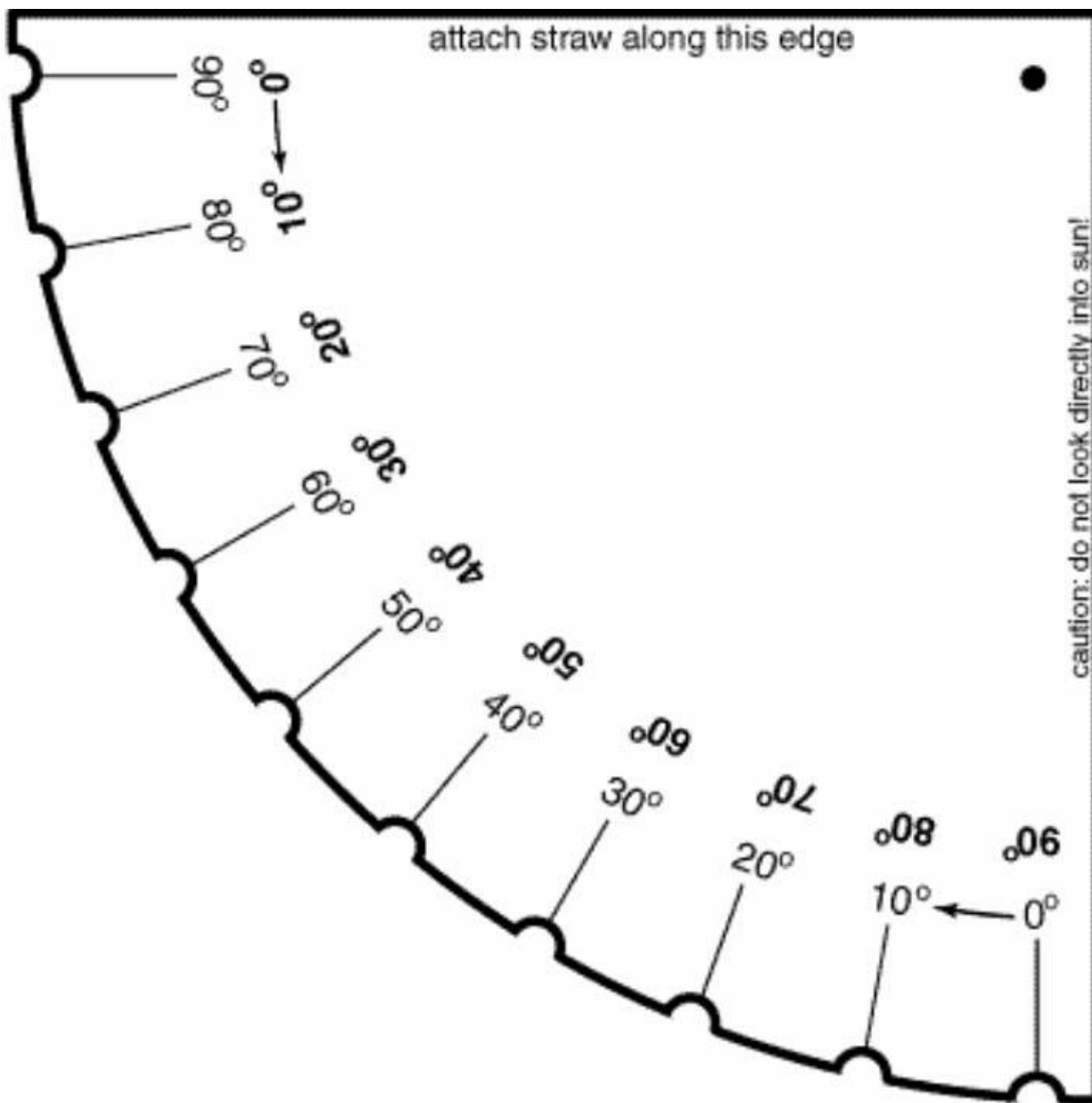
Step #: Tie a weight to the end of the string that is hanging down over your quadrant pattern. It should look like the quadrant seen above!

To Use Your Quadrant You Will Need: □ • A friend □ • Objects to Measure □ •

Step #1 If you want to find the altitude of an object, look at that object through the straw. Flagpoles, stars and tall buildings work well.

Step #2 The point where the string crosses the scale gives you your measurement. Have your friend read the angle on the lower scale. That is the object.'s altitude!

QUADRANT PATTERN



HISTORY OF THE SEXTANT

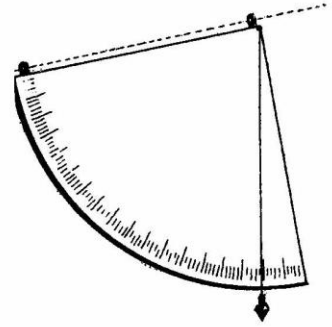
It's all done with angles from star to horizon.

1



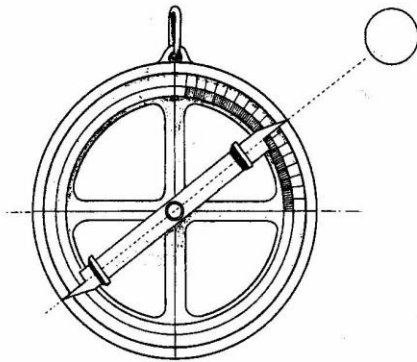
KAMAL

2



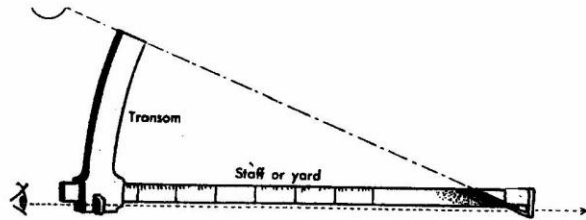
QUADRANT

3



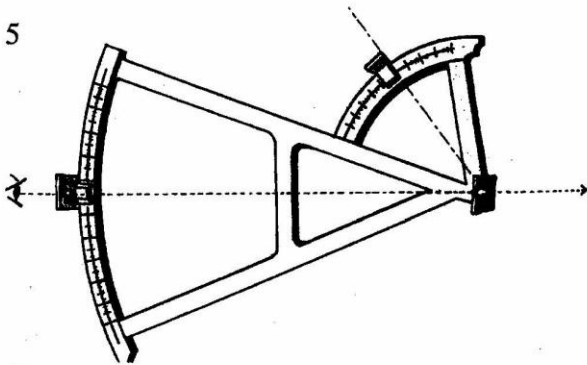
ASTROLABE

4



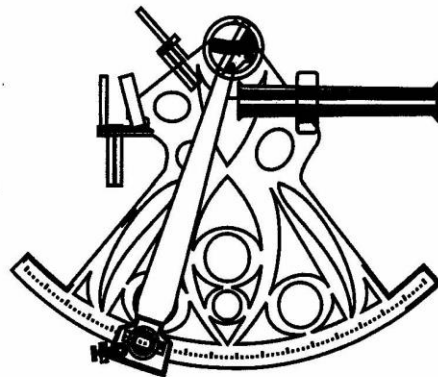
BACK STAFF

5



DAVIS QUADRANT

6



SEXTANT

