

Making a Simple Astrolabe

About this Activity

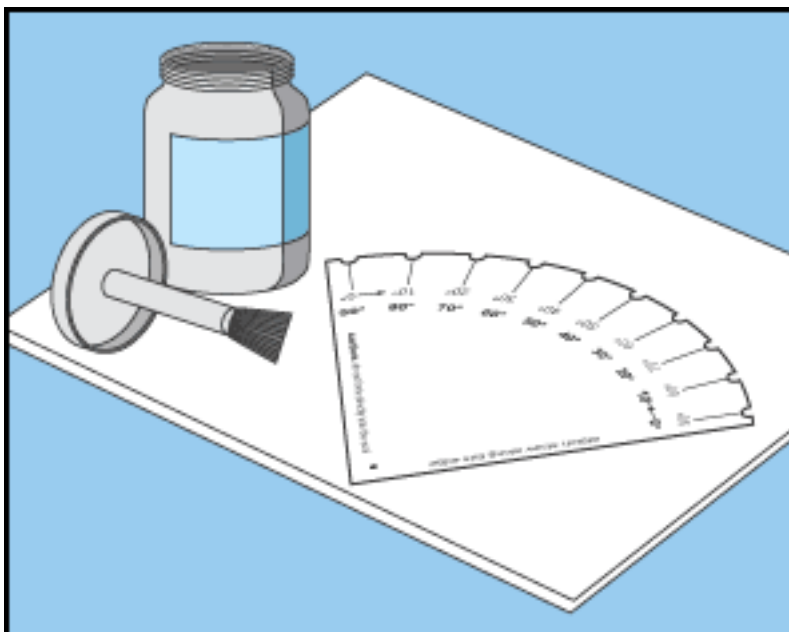
An astrolabe (pronounced AS'-tro-layb) is a device used for measuring altitude, including the height of objects in the sky. This activity covers the construction of the astrolabe; the next activity in the series, Using a Simple Astrolabe, focuses on how to use it.

What You'll Need:

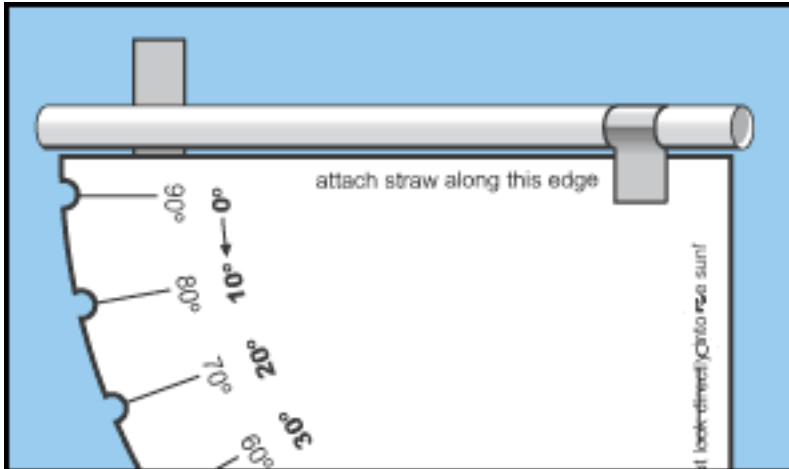
- 1 - piece of cardboard, manila file folder, or other stiff paper
- 1 - piece of dark thread or string 12 inches (30 centimeters) long.
- 1 - small weight, such as a metal washer
- 1 - plastic drinking straw
- 1 - copy of an astrolabe drawing
- 1 - container of glue or paste
- 1 - pair of scissors
- 1 - roll tape
- 1 - paper hole puncher

What to Do

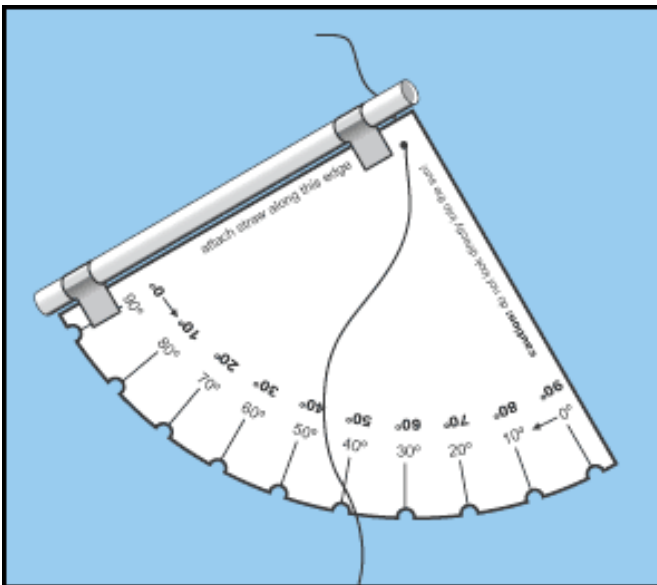
1. Print out a copy of the astrolabe drawing.
2. Glue the copy of the astrolabe drawing to a piece of cardboard or file folder. Cut the astrolabe out with scissors.
3. Using scissors or a paper hole-puncher, carefully make a small notch at each of the lines marked along the curved edge of the astrolabe. These notches will come in handy when you're measuring the angle between two celestial objects and you have to hold the astrolabe horizontally.



- Cut a drinking straw to the same length as the sides of the astrolabe.
- Tape the drinking straw to the edge of the astrolabe marked "Attach straw to this edge." Be careful to not tape the straw on the astrolabe, but just on the edge.

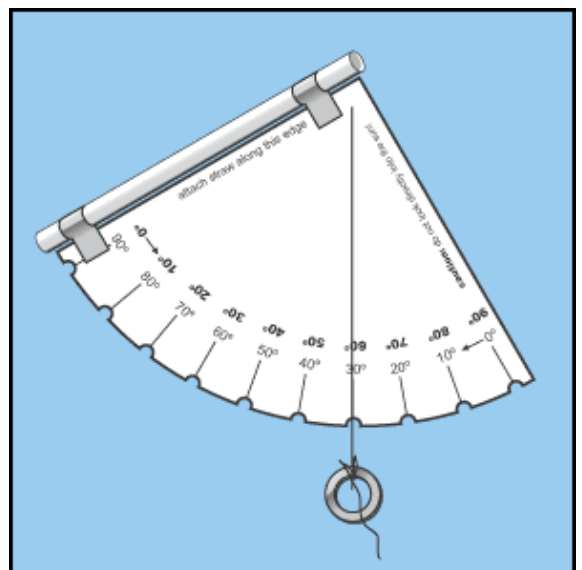


- Carefully poke a small hole through the astrolabe where the "X" is marked, pass the string through it, and either knot the string at the back of the cardboard or tape it there.

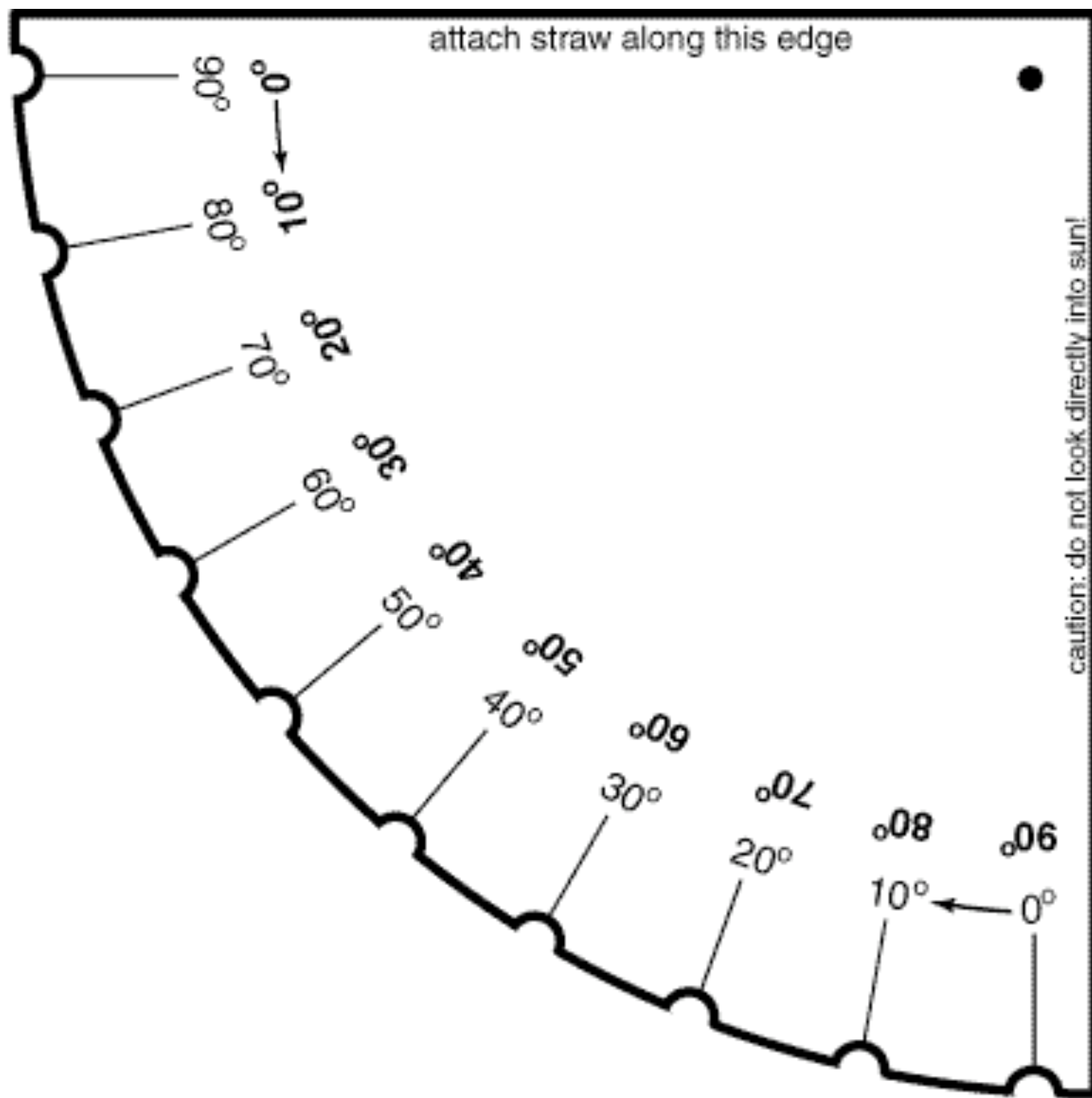


- Tie the small weight to the opposite (front) end of the string as shown.

You have now constructed an astrolabe!



attach straw along this edge



caution: do not look directly into sun!