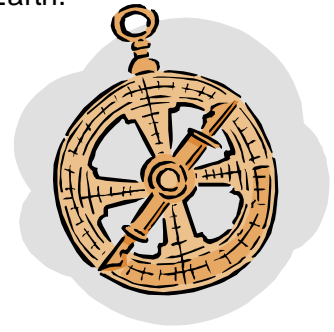


Create Your Own Astrolabe

OBJECTIVES

1. To determine a method for measuring the position of stars relative to the Earth.
2. To locate celestial bodies.

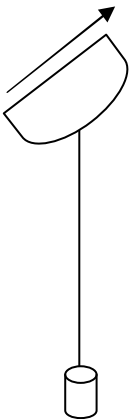


WHAT YOU NEED

- A4 cardboard
- String 30cm long
- Small weight (eraser, bull clip, metal washer)
- Plastic drinking straw
- Copy of an astrolabe drawing
- tape

WHAT TO DO

1. Print a copy of the astrolabe drawing onto cardboard.
2. Cut the drawing out, making 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.
3. Cut a drinking straw to the same length as the sides of the astrolabe.
4. Tape the straw to the edge of the astrolabe marked "attach straw to this edge".
5. Punch 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.
6. Tie the small weight to the opposite end of the string as shown.
7. Practice using the astrolabe by looking through the straw at the top of the object.
8. Have someone read the altitude in degrees from the side of the astrolabe. The point where the string crosses the scale is the proper measurement.
9. In the night sky choose a celestial object, look through the straw to find it and measure the altitude.



QUESTIONS

If you were to measure the altitude of the sun at the same time over a number of weeks, would the measurement change? Why or why not?

RESOURCES USED TO DEVELOP THIS ACTIVITY

http://cse.ssl.berkeley.edu/AtHomeAstronomy/activity_07.html Accessed: 25.10.2005 Title: Making a Simple Astrolabe

http://cse.ssl.berkeley.edu/AtHomeAstronomy/activity_08.html Accessed: 25.10.2005 Title: Using a Simple Astrolabe

Astrolabe

