



View the presentation and take notes on each instrument using the Navigation Tools Worksheet

CELESTIAL NAVIGATION PRESENTATION

Navigation Worksheet

Match the instrument to the description by writing a letter in the blank.

_____back-staff

_____cross-staff

_____chart

_____astrolabe

_____quadrant

_____globe

_____armillary sphere

_____sundial

- A.** Used to find the time of day. It is aligned with north and a shadow falls on the gauge to show the time.
- B.** This kind of innovative map was first used in the 15th century to show a view of the earth from outer space.
- D.** Also called a Davis Quadrant after its inventor, this instrument was used to sight the sun to find latitude. Since looking at the sun could injure the eye, shadows were employed to get a reading.
- E.** This map of the water was originally called a portolan. It was the first map of its kind: a literal representation of the coastline.
- F.** Used to find latitude. It uses different sized transoms to measure the height of an object above the horizon.
- G.** This instrument measured the altitude of an object above the horizon (noon altitude of sun or declination of a known star to determine latitude. Made by the Portuguese in 1481
- H.** Usually made from wood. Its name means a fourth of a circle. Like many of these instruments it used to measure the height of a star or the sun above the horizon.
- I.** A three-dimensional diagram of the stars, it looks like a series of rings attached to form a sphere.





ACROSTIC SUMMARY

Using each letter, begin a word or phrase that related to how latitude was determined during the Age of Exploration.

L _____

A _____

T _____

I _____

T _____

U _____

D _____

E _____