Changing Perspectives Project Sample Learning Activity for Stage 2

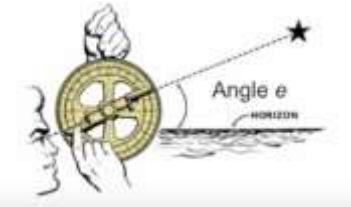
Theme 4: Navigation and Ship Design

Help Captain Vancouver Navigate his ship and plot your course on the map below.

Using North Star and local noon Greenwich Mean Time (GMT) readings calculate the ship's longitude and Latitude over four days.

1) **Latitude**

Can you calculate how many degrees of latitude the ship is north of the equator? The following sextant measurements show the angle of the North Star relative to the horizon. Remember, the North Star is at 90 degrees to the North Pole and the equator is at 0 degrees.



Day	North Star Reading degrees south of the North Star	Latitude
One	46 degrees	
Two	47 degrees	
Three	49 degrees	
Four	50 degrees	

2) **Longitude:**

Knowing that one hour is equal to 15 degrees and 4 minutes is equal to 1 degree calculate the ships position for the following GMT readings.

Day	Greenwich Time at 12 noon local time	Longitude
One	8:00 PM	
Two	8:32 PM	
Three	8:32 PM	
Four	8:16 PM	

3) Using the longitude and latitude figures you have calculated plot the ship's location for each of the four days