Intermediate Science 9

STSE- Celestial Navigation



Student Name:

PART A: MULTIPLE CHOICE: Place the correct answer in the space provided on the answer sheet.

- 1. Who discovered Newfoundland on June 24 th 1497?
 - (A) Christopher Columbus
 - (B) John Cabot
 - (C) John Guy
 - (D) Leif Eriksson
- 2. Ursa Major is a constellation that includes seven stars that make ...
 - (A) The Big Dipper
 - (B) The Little Dipper
 - (C) Orion's Belt
 - (D) Leo the Lion
- 3. Which of the following is true for the North Star if observed from the same location each night?

	Another Name	Location
(A)	Polaris	Always directly over head
(B)	Polaris	Stays the same distance above the horizon
(C)	Celestial	Always directly over head
(D)	Celestial	Stays the same distance above the horizon

- 4. If Polaris can be seen at 30° above the horizon, what latitude are you at?
 - (A) North 30°
 - (B) North 60°
 - (C) South 30°
 - (D) South 30°
- 5. Which of the following was first used by early explorers for celestial navigation?
 - (A) Latitude
 - (B) Longitude
 - (C) Ocean Currents
 - (D) Angle of the land with the horizon
- 6. What device did early Arabian explorers use to measure latitude.
 - (A) Astrolabe
 - (B) Kamal
 - (C) Quadrants
 - (D) Sextants

- 7. What celestial navigation tool was found in a shipwreck at Red Bay, Labrador?
 - (A) Astrolabe
 - (B) Kamal
 - (C) Quadrants
 - (D) sextants
- 8. What is a chronometer use for?
 - (A) To determine latitude
 - (B) To determine longitude
 - (C) To measure angles below the horizon
 - (D) To determine degrees North and South
- 9. What ship sailed in 1772 that used a chronometer?
 - (A) HMS Matthew
 - (B) HMS Resolution
 - (C) HMS Discovery
 - (D) HMS Bounty
- 10. What modern technology is used for navigation?
 - (A) Astrolabe
 - (B) GPS
 - (C) Kamal
 - (D) sextants
- 11. What does the acronym GPS represent?
 - (A) Global Positioning Systems
 - (B) Global Place Systems
 - (C) Great Place Systems
 - (D) Great Positioning Systems

MATCHING: PART B

Instruction: Match each Term on the left with the best Descriptor on the right. Each Descriptor may be used only once. Place your answers on the scantron

TERM	DESCRIPTOR
12Celestial navigation	A. using a celestial object such as the moon, planets or stars to navigate.
13 Kamal	3
14Astrolabe	B. allowed the mariner to sight celestial bodies including the moon, the sun and stars.
15 GPS, LORAN and Radar	C. Is a celestial navigation device that determines latitude.
16 Chronometer	D. A method in celestial navigation that is used to measure longitude.
	E. Modern methods to navigate at sea.

PART C: WRITTEN RESPONSE

Explain why a sailor would be unable to use celestial navigation all the time
What alternatives do we have to celestial navigation today?
Why is it important to know how to use a variety of navigation techniques?