

**Space Exploration** - Section 1 -  
Human understanding of both Earth and space has changed over time

Name \_\_\_\_\_

Class \_\_\_\_\_

**Early Views**

- Many dates in the celestial calendar are marked by the amount of daylight. In the Northern Hemisphere the longest day occurs on June 21 and is called ...
  - Vernal equinox
  - Autumnal equinox
  - Summer solstice
  - Winter solstice
- The Mayans of Central America built an enormous cylinder-shaped tower at **Chichén Itzá** to celebrate the occurrence of the ...
  - solstices
  - equinoxes
  - Solar eclipse
  - Lunar eclipse
- The width of a mitt was used by the **Inuit** peoples in the high Arctic to gauge the height of the Sun above the horizon. When it rose to one mitt-width high it meant ...
  - The days would get longer and warmer
  - The nights would get colder and shorter
  - Seal pups would be born in two lunar cycles
  - The Northern Lights would shine their brightest
- Aristotle's proposed model of the solar system to explain planetary motion was the Geocentric Model. At the center was the Earth and ...
  - water
  - wind
  - fire
  - gas
- Copernicus proposed a model to explain planetary motion, called the Heliocentric model. Johannes Kepler, put in place what was missing from Copernicus' model. He realized that the orbits of the planets were ...
  - circular
  - geocentric
  - intersecting
  - ellipses

**Discovery Through Technology**

- The unit used to measure 'local distances' in space (inside our solar system) is called an **astronomical unit**. One astronomical unit is equal to the average distance from the center of the Earth to the center of the Sun. The largest planet, Jupiter, is approximately ...
  - 5 AU's from the Sun
  - 10 AU's from the Sun
  - 19 AU's from the Sun
  - 30 AU's from the Sun
- In the 2<sup>nd</sup> Century A.D. Egyptian astronomers used an instrument, called a **quadrant** to ...
  - measure the angle between the Moon and any given star
  - identify details in the far reaches of the night sky
  - chart astronomical position and predict the movement of stars
  - measure a star's height above the horizon

8. Arabian Astronomers used an instrument, called an **astrolabe** to ...
- A. **measure the angle between the Moon and any given star**
  - B. **identify details in the far reaches of the night sky**
  - C. **make accurate charts of star positions predict the movement of stars**
  - D. **measure a star's height above the horizon**
9. The light from our sun takes about 8 minutes to reach the Earth. Light from Pluto takes...
- A. **5 hours**
  - B. **5 days**
  - C. **5 weeks**
  - D. **5 months**
10. When measuring the diameter of the sun, we use an indirect method, so that we can determine the diameter without actually measuring it directly. To calculate the accuracy of your measured value, this is calculated to show how far from the real value your measured value is ...
- A. **actual error**
  - B. **estimated error**
  - C. **percent error**
  - D. **adjusted error**

#### Describing The position of Objects In Space

11. The direction directly overhead is called ...
- A. **azimuth**
  - B. **altitude**
  - C. **zenith**
  - D. **astroplane**
12. To locate an object in the sky, two questions must be solved. How high is it in the sky? and in what direction is it? The term that identifies the **compass direction** is ...
- A. **azimuth**
  - B. **altitude**
  - C. **zenith**
  - D. **astroplane**
13. When constructing an astrolabe to locate the position of a star in the night sky, the **protractor** is used to determine the ...
- A. **azimuth**
  - B. **altitude**
  - C. **zenith**
  - D. **astroplane**
14. The ancient Greeks studied the stars and the celestial bodies. They had a word that meant '**wanderer**' to describe a celestial body that changed its position in the sky. 'Wanderer' is the origin for the word
- A. **Comet**
  - B. **Asteroid**
  - C. **Star**
  - D. **Planet**
15. The imaginary '**sphere of sky**' showing the ecliptic (apparent path of the Sun through the sky during the year) that surrounds the Earth is identified as the ...
- A. **Equinox sphere**
  - B. **Celestial sphere**
  - C. **Heavenly sphere**
  - D. **Solstice sphere**

## Space Exploration - Section 1 - ANSWER KEY

Human understanding of both Earth and space has changed over time

Name \_\_\_\_\_

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