

Topic 4 - Bigger and Smarter Telescopes

1. Sir William Herschel built one of the first really large reflecting telescopes and using it in 1773 he discovered the planet ...
 - A. Pluto
 - B. Neptune
 - C. Saturn
 - D. Uranus

2. The **NTT** (New Technology Telescope) directs computers to control an image, always moving the mirror to reflect changes in the Earth's atmosphere. The technology that does this is called ...
 - A. fibre optics
 - B. adaptive optics
 - C. reflective optics
 - D. spectral optics

3. The twinkling effect of a star is created by the ...
 - A. atmospheric motion
 - B. debris in space
 - C. size of the star
 - D. composition of the star

4. A galaxy is a grouping of millions or billions of stars, gas and dust. It is held together by ...
 - A. electromagnetism
 - B. magnets
 - C. gravity
 - D. glue

5. Two ways to measure long distances indirectly, on the ground, or in space are triangulation and ...
 - A. spectroscopy
 - B. holography
 - C. diffraction
 - D. parallax

6. Triangulation is based on the geometry of a ...
 - A. triangle
 - B. polygon
 - C. rectangle
 - D. quadrilateral

7. Using the parallax technique, the longest baseline that astronomers can use is the diameter of Earth's ...
 - A. orbit
 - B. crust
 - C. surface
 - D. atmosphere

8. The distance from the Earth to the Sun is 150 million kms and is called ...
 - A. a parsec
 - B. a light year
 - C. an interstellar unit
 - D. an astronomical unit

9. Triangulation is based on a process of estimation, using these 3 steps:
 1. *Making a scale drawing*
 2. *Creating a baseline*
 3. *Measuring angles from the end of the baseline*The correct order of the steps to follow in this method of estimating distance is ...
 - A. 1 2 3
 - B. 2 3 1
 - C. 2 1 3
 - D. 3 2 1