## **Topic 4 - Bigger and Smarter Telescopes**

- 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. 123
- B. 231
- C. 213
- D. 321