

Telescopes Quiz

1. Which of these is a reflector telescope?

- a) A convex lens is used at the end of a tube to bring an image into focus at a point
- b) Collects light, reflects it off a concave mirror, brought to a focus by a secondary mirror further up the tube

2. Why are larger telescopes reflectors rather than refractors?

- a) Refractors suffer from lens sagging and colour aberration
- b) Images look clearer in reflectors
- c) Cannot see so far with a reflector

3. Mobile Phone signals and Telecommunications can affect which of these?

- a) Telescope Observations
- b) Radio Observations
- c) Television Signals

4. Why is NOT a reason why observatories are often sited on high mountains?

- a) Less atmosphere to obscure viewing
- b) Located in areas that have good, dry weather and fewer clouds
- c) Built in remote locations far removed from light pollution
- d) The views are lovely

5. True or False? Earth's atmosphere is transparent to visible light, microwaves and some radio waves.

- a) True
- b) False

6. True or False? X-Ray observatories are typically on-board spacecraft as are many ultraviolet and infrared observing stations.

- a) True
- b) False

7. What are the Van Allen belts?

- a) A magnetic field around Earth that traps solar particles
- b) An area around the Earth that can be seen from the Moon
- c) A trophy that Boxers fight for

8. Aperture is..?

- a) Proportional to the diameter of the objective element
- b) Related to the diameter of the objective element
- c) Focal length of the objective divided by the focal length of the eyepiece

9. Field of view is..?

- a) The amount of light that can be collected by the objective
- b) The circle of sky visible through the eyepiece

10. Radio Telescopes are..?

- a) Typically large to maintain resolution
- b) Sometimes connected to other radio telescopes in an array
- c) Susceptible to radio Interference

11. Infrared astronomy has been important in the exploration of..?

- a) The discovery of quasars, jets from black holes, the structure of the Milky Way and protoplanetary discs
- b) Protostars, dust and molecular clouds and hotspots on moons
- c) Gamma ray bursts, black hole accretion discs and the corona and chromosphere structure of young stars

Answers

1. (b)
2. (a)
3. (b)
4. (d)
5. (a)
6. (a)
7. (a)
8. (b)
9. (b)
10. (a) (b) (c)
11. (b)