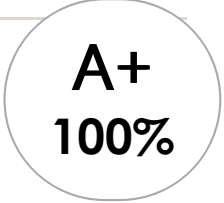


20 Multiple choice questions



A+
100%

1. a star at the end of its evolution; its mass similar to the sun with diameter 20km
 - a. **CORRECT: neutron star**
 - b. luminosity
 - c. giant stars
 - d. nucleus

2. the distance that light travels in one year
 - a. **CORRECT: light-year**
 - b. matter
 - c. infrared
 - d. giant stars

3. large, highly luminous stars which are brighter than main sequence stars of the same colour; giants represent a late phase in stellar evolution
 - a. light-year
 - b. infrared
 - c. matter
 - d. **CORRECT: giant stars**

4. the spectrum of an element consisting of lines in certain frequencies (colours) only (each line being an image of the slit of the spectroscope)
 - a. geocentric
 - b. **CORRECT: line spectrum**
 - c. ionosphere
 - d. giant stars

5. everything that exists that has mass and takes up space
 - a. nucleus
 - b. giant stars
 - c. light-year
 - d. **CORRECT: matter**

6. the dense positive core of the atom containing almost all the mass of the atom; made up protons and neutrons
 - a. matter
 - b. infrared
 - c. parallax
 - d. **CORRECT: nucleus**

7. a spherical shell of ionised gas surrounding the earth; it can be used to reflect short-wave radio waves
 - a. infrared
 - b. giant stars
 - c. nucleus
 - d. **CORRECT: ionosphere**

8. system is one which has the centre of the earth as its reference point; the model of the solar system which has the earth at the centre
 - a. heliocentric model
 - b. ionosphere
 - c. matter
 - d. **CORRECT: geocentric**

9. the constant that relates the speed of recession of the galaxies to the age of the universe
 - a. nucleus
 - b. **CORRECT: hubble constant**
 - c. geocentric
 - d. giant stars

10. one which has the sun as the centre for measurements
 - a. neutron star
 - b. **CORRECT: heliocentric model**
 - c. line spectrum
 - d. geocentric

11. a diagram which displays the brightness of stars versus either their colour, spectral class or surface temperature
 - a. **CORRECT: hertzsprung-russle diagram**
 - b. hubble constant
 - c. neutron star
 - d. Kepler's laws

12. three laws relating the motion of the planets
 - a. **CORRECT: Kepler's laws**
 - b. inverse square law
 - c. parallax
 - d. nucleosynthesis

13. electromagnetic waves with wavelengths ranging from 1 mm to 0.1 m
 - a. nucleus
 - b. ionosphere
 - c. infrared
 - d. **CORRECT: microwaves**

14. a relationship in which one quantity is directly proportional to the inverse of another quantity squared
 - a. main sequence
 - b. infrared
 - c. **CORRECT: inverse square law**
 - d. neutron star

15. the production of the elements by nuclear reactions
 - a. geocentric
 - b. ionosphere
 - c. **CORRECT: nucleosynthesis**
 - d. nucleus

16. the force of attraction between two masses is proportional to the product of the masses and inversely proportional to the square of the distance between their centres
- hertzsprung-russle diagram
 - nucleosynthesis
 - neutron star
 - CORRECT: Newtons law of universal gravitation**
17. long-wave radiation emitted by hot objects with wavelengths greater than 700nm and less than 1 mm
- microwaves
 - CORRECT: infrared**
 - parallax
 - ionosphere
18. the apparent movement of an object against a background, when viewed from different positions
- nucleus
 - CORRECT: parallax**
 - infrared
 - matter
19. a measure of the actual brightness of an astronomical object
- nucleus
 - infrared
 - light-year
 - CORRECT: luminosity**
20. a region on the H-R diagram containing the majority of stars; it is in this region that stars spend the main part of their lives converting hydrogen into helium
- ionosphere
 - matter
 - CORRECT: main sequence**
 - microwaves