

1. EARTH AND SPACE SCIENCE *Short Answer* What are the Precambrian fossils which are the remains of the material deposited by algae, found in distinctive layers of calcium carbonate?

ANSWER: STROMATOLITES

2. EARTH AND SPACE SCIENCE *Short Answer* The pelagic, benthic, and abyssal ocean life zones classify parts of the ocean by what factor?

ANSWER: DEPTH

3. EARTH AND SPACE SCIENCE *Multiple Choice* Which of the following most accurately estimates the maximum spring tidal range?

W) 10 meters

X) 15 meters

Y) 17 meters

Z) 19 mete

ANSWER: Y) 17 METERS

4. EARTH AND SPACE SCIENCE *Short Answer* What tidal pattern is characterized by two high tides and two low tides each tidal day?

ANSWER: SEMIDIURNAL

5. EARTH AND SPACE SCIENCE *Short Answer* What class of fog is characterized by cool air moving over warm water, causing evaporation from the water surface?

ANSWER: STEAM FOG

6. EARTH AND SPACE SCIENCE *Short Answer* If the Bergeron Process is to cold clouds, then what process is to warm clouds?

ANSWER: COLLISION-COALESCENCE PROCESS

7. EARTH AND SPACE SCIENCE *Multiple Choice* In what direction does the jet stream flow?

W) East to West

X) West to East

Y) North to South

Z) South to North

ANSWER: X) WEST TO EAST

8. EARTH AND SPACE SCIENCE *Short Answer* What is the name of the process in which the position of a cold front advances faster than the warm front and begins to lift the warm front?

ANSWER: OCCLUSION

9. EARTH AND SPACE SCIENCE *Short Answer* What wind speed, in miles per hour, must a tropical storm reach to be considered a hurricane?

ANSWER: 74

10. EARTH AND SPACE SCIENCE *Short Answer* Which meteor shower, associated with the Halley's comet, occurs around May 3rd through 5th?

ANSWER: ETA AQUARIDS

11. EARTH AND SPACE SCIENCE *Short Answer* What is the problem that occurs with refractive telescopes, due to the fact that when focused on red light, blue and violet light are out of focus?

ANSWER: CHROMATIC ABERRATION

12. EARTH AND SPACE SCIENCE *Short Answer* What diagram, named after the scientist that created it, is used to model the sunspot cycle?

ANSWER: MAUNDER BUTTERFLY DIAGRAM

13. EARTH AND SPACE SCIENCE *Short Answer* What is the name of the reaction which converts 4 hydrogen nuclei into the nucleus of a helium atom?

ANSWER: PROTON PROTON CHAIN

14. EARTH AND SPACE SCIENCE *Short Answer* In which corner of the HR diagram would the brightest, hottest stars be found?

ANSWER: UPPER LEFT

15. EARTH AND SPACE SCIENCE *Short Answer* The star Proxima Centauri would be found closest to what corner of an HR Diagram?

ANSWER: BOTTOM/LOWER RIGHT

16. EARTH AND SPACE SCIENCE *Multiple Choice* If the initial mass of the interstellar cloud is 6 times the mass of the Sun, what would be the terminal state of the star created from this cloud?

W) White Dwarf
X) Black Hole
Y) Neutron Star
Z) Planet

ANSWER: Y) NEUTRON STAR

17. EARTH AND SPACE SCIENCE *Short Answer* In what constellation is the Crab Nebula found?

ANSWER: TAURUS

18. EARTH AND SPACE SCIENCE *Short Answer* What galaxy type is the most abundant, making up 60% of all galaxies?

ANSWER: ELLIPTICAL

19. EARTH AND SPACE SCIENCE *Short Answer* What type of moraine is produced when an ice front occasionally stabilizes during retreat, and deposits a layer of till?

ANSWER: RECESSIONAL END MORaine

20. EARTH AND SPACE SCIENCE *Short Answer* What Philippine volcano, which erupted in June 1991, injected nearly 25 million tons of sulfur dioxide into the atmosphere, and provided scientists with the opportunity to study the climactic effects of a major volcanic eruption?

ANSWER: MOUNT PINATUBO

21. EARTH AND SPACE SCIENCE *Short Answer* What is the name of a large body of air characterized by the sameness of temperature and humidity?

ANSWER: AIR MASS

22. EARTH AND SPACE SCIENCE *Short Answer* What is the name of a dune formed with scalloped rows, oriented at right angles to the wind?

ANSWER: BARCHANOID

23. EARTH AND SPACE SCIENCE *Short Answer* What is the lifting of air which results when cool air acts as a barrier over which warmer air rises?

ANSWER: FRONTAL WEDGING