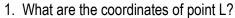
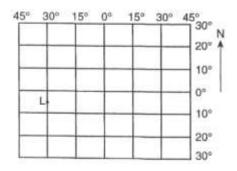
MODEL OF THE EARTH REVIEW QUESTIONS SET 1

The diagram to the right represents part of Earth's latitude-longitude system.



- (1) 5°S, 30°W
- (2) 5°N, 30°E
- (3) 5°W, 30°S
- (4) 5°E, 30°N



2. Which latitude and longitude coordinates represent a location on the continent of Australia?

(1) 20°S, 135°W

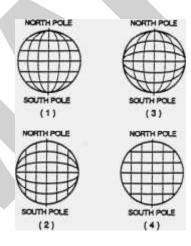
(3) 20°N, 135°W

(2) 20°S, 135°E

(4) 20°N, 135°E

The diagrams to the right represent four systems of imaginary lines that could be used to locate positions on a planet.

3. Which system is most similar to the latitude-longitude system used on the Earth?



- 4. Which of the following is thickest in depth?
 - (1) hydrosphere

(3) atmosphere

(2) lithosphere

- (4) thermosphere
- 5. An air temperature of 95°C most often exists in which layer of the atmosphere?
 - (1) mesosphere

(3) troposphere

(2) thermosphere

- (4) stratosphere
- 6. Earth's troposphere, hydrosphere, and lithosphere contain relatively large amounts of which element?
 - (1) hydrogen

(3) iron

(2) potassium

- (4) oxygen
- 7. As the altitude increases within Earth's mesosphere, air temperature generally
 - (1) decreases, only

(3) decreases, then increases

(2) increases, only

(4) increases, then decreases

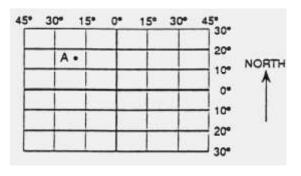
The diagram shows a latitude and longitude grid.

- 8. What are the approximate latitude and longitude of point A?
 - (1) 15°S, 20°W

(3) 15°N, 20°W

(2) 15°N, 20°E

(4) 15°S, 20°E



- 9. Ozone is concentrated in Earth's atmosphere at an altitude of 20-35 km. Which atmospheric layer contains the greatest concentration of ozone?
 - (1) mesosphere

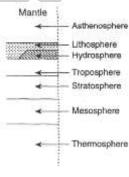
(3) troposphere

(2) thermosphere

- (4) stratosphere
- 10. What do the tropopause, stratopause, and mesopause all have in common?
 - (1) Each is an interface (boundary) between two layers of the atmosphere.
 - (2) Each is a point of maximum temperature in its layer of the atmosphere.
 - (3) Each is a zone of decreasing water vapor content within the atmosphere.
 - (4) Each is a region of increasing pressure within the atmosphere.

The diagram below shows spheres associated with the Earth.

- 11. Which spheres are zones of the Earth's atmosphere?
 - (1) asthenosphere, lithosphere, and hydrosphere
 - (2) hydrosphere, troposphere, and stratosphere
 - (3) lithosphere, hydrosphere, and troposphere
 - (4) stratosphere, mesosphere, and thermosphere



(Not drawn to scale)

- 12. Where are atmospheric pressure readings of 0.5 atmosphere found?
 - (1) troposphere

(3) mesosphere

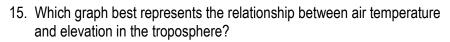
(2) stratosphere

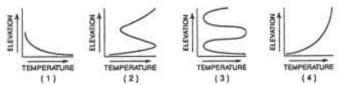
- (4) thermosphere
- 13. As the altitude increases from sea level to 50 km, the temperature usually
 - (1) decreases, only

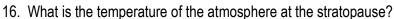
(3) decreases, then increases

(2) increases, only

- (4) increases, then decreases
- 14. Which list shows the atmospheric layers in the correct order upward from the Earth's surface?
 - (1) thermosphere, mesosphere, stratosphere, troposphere
 - (2) troposphere, stratosphere, mesosphere, thermosphere
 - (3) stratosphere, mesosphere, troposphere, thermosphere
 - (4) thermosphere, troposphere, mesosphere, stratosphere







(1) -90°C

(3) 0°C

(2) -55°C

(4) 15°C

(1) $1 - 5 \text{ g/m}^3$

(3) 10 - 15 g/m³

(2) 8 - 10 g/m³

(4) 30 - 40 g/m³

(1) nitrogen

(3) carbon dioxide

(2) oxygen

(4) water vapor

19. If atmospheric pressure measurements were taken at regular intervals from sea level to the mesopause, the measurements would most likely show that the pressure

(1) decreases, only

(3) remains the same

(2) increases, only

(4) decreases, then increases

(1) 11 km

(3) 50 km

(2) 39 km

(4) 81 km

21. What is the average temperature at sea level?

(1) 15°C

(3) -55°C

(2) 0°C

(4) -90°C

22. What is the approximate altitude of the mesopause?

(1) 50 km

(3) 80 km

(2) 66 km

(4) 90 km

23. As the altitude within the troposphere increases, the amount of water vapor generally

(1) decreases, only

(3) remains the same

(2) increases, only

(4) decreases, then increases

24. 99% of all weather occurs in the

(1) stratosphere

(3) troposphere

(2) thermosphere

(4) mesosphere