

## 26 Multiple choice questions

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1. a form of radiant energy that comes from the sun and can cause skin damage, such as melanoma and other types of skin cancer
  - a. ultraviolet (UV) radiation
  - b. evapotranspiration
  - c. solar radiation
  - d. terrestrial radiation
2. the water vapour content of the air
  - a. humidity
  - b. ozone
  - c. acid rain
  - d. wind
3. the colourless gas that is the product of the reaction between oxygen and the sun's ultraviolet radiation
  - a. ozone layer
  - b. wind
  - c. ozone
  - d. humidity
4. a small, localised area within a larger climatic region in which the atmospheric characteristics differ significantly from those of the major climate
  - a. humidity
  - b. microclimate
  - c. lapse rate
  - d. conduction
5. a complex mixture of air pollutants produced in the atmosphere by the reaction of hydrocarbons and nitrogen oxides under the influence of sunlight
  - a. atomic oxygen
  - b. condensation
  - c. ozone layer
  - d. photochemical smog

6. areas of the atmosphere with relatively high or low barometric pressure; often referred to as highs and lows
  - a. atmospheric pollution
  - b. atmosphere
  - c. atomic oxygen
  - d. atmospheric pressure systems
7. energy transfer from one material to another by direct contact
  - a. wind
  - b. conduction
  - c. acid rain
  - d. condensation
8. the amount of heat that is lost or gained when a substance undergoes a phase change, such as condensation, evaporation or sublimation
  - a. latent heat
  - b. ozone
  - c. atmosphere
  - d. lapse rate
9. the innermost layer of the atmosphere in which most of the earth's weather occurs
  - a. atmosphere
  - b. lapse rate
  - c. ozone
  - d. troposphere
10. the trapping and buildup of heat in the troposphere, near the earth's surface
  - a. troposphere
  - b. greenhouse effect
  - c. greenhouse gases
  - d. latent heat
11. movements within a medium caused by a difference in temperature
  - a. convection currents
  - b. condensation
  - c. conduction
  - d. fossil fuels

12. the process by which water vapour becomes a liquid
  - a. condensation
  - b. acid rain
  - c. solar radiation
  - d. conduction
13. precipitation containing excessive amounts of acid that is formed when oxides of sulfur and nitrogen mix in the atmosphere
  - a. acid rain
  - b. humidity
  - c. lapse rate
  - d. conduction
14. a phenomenon of urban settlements where relatively warm atmospheric temperatures prevail in the most heavily built-up areas and decrease outward towards the fringes
  - a. condensation
  - b. latent heat
  - c. urban heat island
  - d. acid rain
15. gases in the earth's atmosphere that contribute to the greenhouse effect e.g. carbon dioxide, ozone, methane and nitrous oxide
  - a. greenhouse effect
  - b. ozone layer
  - c. lapse rate
  - d. greenhouse gases
16. the transparent, odourless mass of air surrounding the earth
  - a. latent heat
  - b. atmosphere
  - c. troposphere
  - d. ozone
17. single oxygen atoms compared to oxygen molecules (two oxygen atoms) found in air
  - a. acid rain
  - b. ozone layer
  - c. atomic oxygen
  - d. atmosphere

18. a change in the chemical composition of the atmosphere that affects the well-being and activities of all living things
  - a. atomic oxygen
  - b. atmospheric pollution
  - c. atmosphere
  - d. atmospheric pressure systems
19. stored heat emitted as longwave radiation by the earth, including islands, oceans and atmosphere
  - a. evapotranspiration
  - b. ultraviolet (UV) radiation
  - c. solar radiation
  - d. terrestrial radiation
20. the transport of moisture from the earth to the atmosphere by evaporation of water and transpiration from plants
  - a. lapse rate
  - b. evapotranspiration
  - c. solar radiation
  - d. condensation
21. energy received from the sun, on which all life depends
  - a. conduction
  - b. condensation
  - c. terrestrial radiation
  - d. solar radiation
22. when a layer of dense, cool air is trapped under a layer of less dense warm air
  - a. evapotranspiration
  - b. greenhouse gases
  - c. temperature inversion
  - d. terrestrial radiation
23. the layer of gaseous ozone in the stratosphere that protects life on earth by filtering out harmful ultraviolet radiation from the sun
  - a. condensation
  - b. ozone layer
  - c. lapse rate
  - d. ozone

24. a movement of air from areas of relatively high atmospheric pressure to areas of relatively low atmospheric pressure
- a. conduction
  - b. humidity
  - c. ozone
  - d. wind
25. energy sources formed in past geological times from organic materials e.g. coal, petroleum and natural gas
- a. ozone
  - b. latent heat
  - c. acid rain
  - d. fossil fuels
26. the decline in temperature that occurs with increasing altitude throughout the troposphere
- a. acid rain
  - b. ozone layer
  - c. latent heat
  - d. lapse rate