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Mr. Schmidt Science 8

Glencoe Earth Science Chapter 11 Vocabulary

conduction convection exosphere mesosphere radiation

stratosphere thermosphere troposphere dew point humidity

latent heat relative humidity saturation temperature inversion

cirrus coalescence condensation nucleus cumulus

orographic lifting precipitation stratus

1. Exosphere – outermost layer of Earth’s atmosphere that is located above the thermosphere with no clear boundary at the top; transitional region between Earth’s atmosphere and outer space.
2. Saturation – the point at which water molecules leaving the water’s surface equals the rate of water molecules returning to the surface.
3. Orographic lifting – cloud formation that occurs when warm, moist air is forced to rise up the side of a mountain.
4. Cirrus – high clouds made up of ice crystals that form at heights of 6000m; often have a wispy, indistinct appearance.
5. Latent heat – stored energy in water vapor that is not released to warm the atmosphere until condensation takes place.
6. Precipitation – all solid and liquid forms of water-including rain, snow, sleet, and hail that falls from clouds.
7. Relative humidity – ratio of water vapor contained in a specific volume of air compared with how much water vapor that amount of air actually can hold; expressed as a percentage.
8. Coalescence – process that occurs when cloud droplets collide and form larger droplets, which eventually become too heavy to remain aloft and can fall to Earth as precipitation.
9. Stratosphere – layer of Earth’s atmosphere that is located above the tropopause and is made up primarily of concentrated ozone.
10. Troposphere – layer of the atmosphere closest to Earth’s surface, where most of the mass of the atmosphere is found and in which most weather takes place and air pollution collects.
11. Thermosphere – layer of Earth’s atmosphere that is located above the mesopause; oxygen atoms absorb solar radiation causing the temperature to increase in this layer.
12. Stratus – a layered sheetlike cloud that covers much or all of the sky in a given area.
13. Conduction – the transfer of thermal energy between objects in contact by the collisions between the particles in the objects.
14. Mesosphere – layer of Earth’s atmosphere above the stratopause.
15. Dew point – temperature to which air is cooled at a constant pressure to reach saturation, at which point condensation can occur.
16. Cumulus – puffy, lumpy-looking clouds that usually occur below 2000m.
17. Humidity – amount of water vapor in the atmosphere at a given location on Earth’s surface.
18. Convection – the transfer of thermal energy by the movement of heated material from one place to another.
19. Condensation nucleus – small particle in the atmosphere around which cloud droplets can form.
20. Temperature inversion – increase in temperature with height in an atmospheric layer, which inverts the temperature-altitude relationship and can worsen air-pollution problems.
21. Radiation – the transfer of thermal energy electromagnetic waves; the transfer of thermal energy from the Sun to Earth by radiation.