

# Answer Key (answers are after the questions).

Name \_\_\_\_\_

## Weather Study Guide

1. Large clouds that often produce thunderstorms are called \_\_\_\_\_ cumulonimbus
2. Wispy, high, feathery clouds are called \_\_\_\_\_ cirrus
3. Flat, layered clouds that often cover much of the sky are \_\_\_\_\_ stratus
4. List the 3 main types of clouds. cirrus, stratus, cumulus
5. What does nimbus refer to? precipitating clouds
6. What does alto refer to? middle
7. What does cirro refer to? high/icy
8. Name the type of clouds that form near the ground and look like puffy cotton. cumulus
9. How do clouds form? When water vapor in the air condenses into liquid water or ice crystals
10. Water that falls from the clouds is called \_\_\_\_\_ precipitation
11. What is the difference between sleet and hail? the size of the pellet and where they formed (hail forms inside cumulonimbus clouds during thunderstorms and sleet forms as rain enters a pocket of air below freezing on the way to the ground)
12. What is the most common type of precipitation? rain
13. Hailstones form in what type of clouds? cumulonimbus
14. What is freezing rain? rain that freezes when it hits the surface
15. Snow falls when humid air in clouds cools below \_\_\_\_\_ freezing, 32F, 0C
16. In which type of cloud do tornadoes form? cumulonimbus

17. A funnel-shaped cloud that touches Earth's surface is a \_\_\_\_\_.  
tornado
18. What type of cloud produces thunderstorms? cumulonimbus
19. What is the average number of tornadoes that occur in the U.S. annually? omit
20. How does a tropical storm become classified as a hurricane? when winds reach 74 mph
21. Describe the conditions in the eye of a hurricane. high pressure, clear skies, calm winds
22. What causes thunder? lightning heats the air, causing it to move rapidly creating sound
23. What causes lightning? winds cause a build up of static electric charges (+ and -) in cumulonimbus clouds; the friction of the movement creates heat
24. Lightning and thunder occur at the same time. Which one do you notice first and why? you would notice lightning first as light travels faster than sound
25. Where should you seek protection during a tornado? lowest point possible (basement or central room with no windows)
26. Where do most tornadoes occur in the United States? Why? the plains states (tornado alley) because that is where warm and cold air masses collide
27. Does cold air hold more or less water than warm air? less because the air is denser, leaving little room for moisture
28. What conditions are needed for hurricanes to develop? warm, moist air
29. What is the most dangerous (property damage and fatalities) part of a hurricane? the storm surge
30. Hurricane season is the busiest during which 3 months for the East Coast? August, September, and October