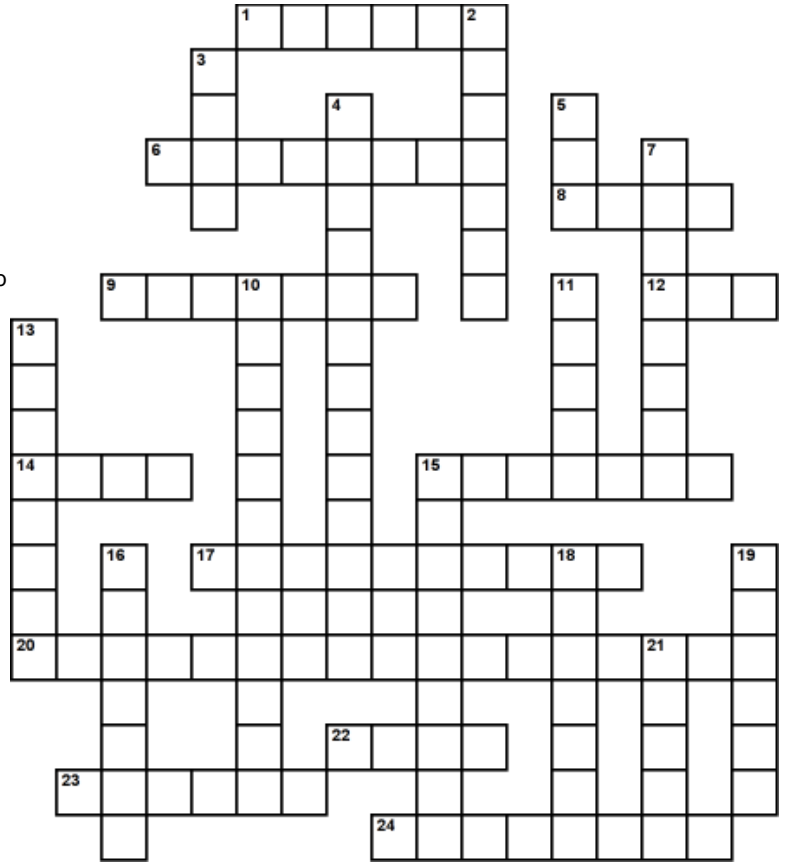


**Across**

1. Radio signals travel farther than the line of sight distance because the Earth seems less \_\_\_\_\_ to radio waves than to light
6. \_\_\_\_\_ hours are generally the best time for long-distance 10 meter band propagation
8. \_\_\_ \_ is the approximate SWR value for the protection circuits to reduce transmitter power (1,2,1)
9. To make a dipole antenna resonant on a higher frequency \_\_\_\_\_ it
12. A loose connection in a feedline might cause erratic changes in \_\_\_ readings
14. As the frequency of a signal passing through coaxial cable is increased the \_\_\_\_ increases
15. The \_\_\_\_\_ wavelength allows UHF signal to more easily penetrate the structure of buildings than VHF signals
17. \_\_\_\_\_ antenna polarization is normally used for long-distance weak-signal CW and SSB contacts using the VHF and UHF bands
20. SWR (8,4,5)
22. The polarization of the original signal is randomized by \_\_\_\_\_ reflections between the Earth and the ionosphere
23. Combining of signals arriving via different path lengths is a cause of \_\_\_\_\_ of signals from distant stations
24. Coax connectors exposed to the weather be sealed against water intrusion o prevent an increase in \_\_\_\_\_ loss



21. The connector which is most suitable for frequencies above 400 MHz (4,1)

**Down**

2. Temperature inversions in the atmosphere causes tropospheric \_\_\_\_\_
3. An antenna that concentrates signals in one directions
4. \_\_\_\_\_ is commonly used to describe the rapid fluttering sounds heard from stations that are moving (6,7)
5. The approximate length, in inches, of a 6 meter 1/2-wavelength wire dipole antenna
7. \_\_\_\_\_ contamination is the most common cause for failure of coaxial cables
10. \_\_\_\_\_ is the distance that radio signals between two points are blocked by the curvature of the Earth (5,7)
11. \_\_\_\_\_ lost in a feedline is converted into heat
13. Try to find a path that \_\_\_\_\_ signals to a distant repeater if buildings or obstructions are blocking the direct path
15. When VHF signals are being received from long distances, they are being refracted from a \_\_\_\_\_ layer (8,1)
16. \_\_\_\_\_ cable is used more often because it is easy to use and requires few special installation considerations
18. VHF signals received via \_\_\_\_\_ reflection exhibit rapid fluctuations of strength and often sound distorted
19. The impedance of the most commonly used coaxial cables (2,4)