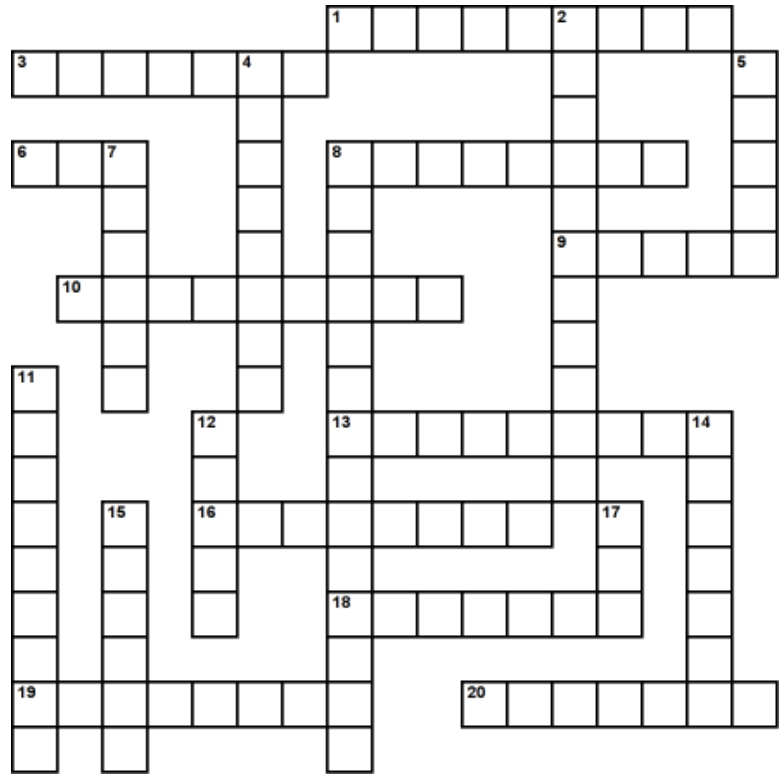


Lesson 7A ver 2

6Feb2015

Across

1. When installing devices for _____ protection in a coaxial cable feedline, ground all of the protectors to a common plate which is in turn connected to an external ground
3. The purpose of a ____ ____ is to lift tower sections or antennas (3,4)
6. A proper grounding method for a tower is separate eight-foot long ground rods for each tower ____, bonded to the tower and each other
8. Put on a climbing harness and safety glasses before _____ an antenna tower
9. It is _____ safe to climb a tower without a helper or observer
10. _____ is the ratio of "on" time to "off" time of a transmitted signal (4,5)
13. Shorting the _____ can cause burns, fire, or an explosion in a 12-volt storage battery
16. Look for and stay clear of any _____ electrical wires when putting up an antenna tower
18. Exposure limits vary with frequency because the human body _____ more RF energy at some frequencies than at others
19. Amateur operators could _____ antennas to prevent exposure to RF radiation in excess of FCC-supplied limits
20. It is unwise to install a 20-ampere fuse in the place of a 5-ampere fuse, because excessive _____ could cause a fire



Down

2. VHF and UHF radio signals are ____-_____ radiation (3-8)
4. A ____-_____ storage battery could overheat, give off flammable gas or explode if it is charged or discharged too quickly (4-4)
5. Frequency and _____ level of the RF field, distance from the antenna to a person, and radiation pattern of the antenna affect the RF exposure of people near an amateur station antenna
7. Ensure that connections are short and direct when installing _____ wires on a tower for lightning protection
8. A fuse or _____ in series with the AC "hot" conductor should always be included in home-built equipment powered from 120V AC power circuits (7,7)
11. Use of _____ cords and plugs, connect all AC powered equipment to a common safety ground, and use of ground-fault interrupters are a good ways to guard against electrical shock (5-4)
12. You might receive an electric _____ from stored charge in large capacitors in a power supply even when it is turned off and disconnected
14. You can make sure your station stays in compliance with RF safety regulations by re-evaluating the _____ whenever an item of equipment is changed
15. Connecting the battery to a car's battery and running the engine is one way to recharge a ____-_____ lead-acid battery (2-4)
17. Explosive ____ can collect near a conventional 12-volt storage battery if not properly vented