Basic Metallic Cartridge Reloading

Test A - Key

NOTE: Page numbers refer to the NRA Guide to Reloading student handbook.

1. Reloading accidents are primarily caused by:
   a. defective or worn reloading equipment.
   b. a combination of ignorance and carelessness. (p. 5 and Lesson I)
   c. errors in reloading manuals.
   d. manufacturing defects in reloading components

2. The purpose of the cartridge case is to:
   a. contain the other three cartridge components.
   b. seal the chamber.
   c. protect the breechface.
   d. all of the above
   e. a and b only (p. 10 and Lesson II)

3. The two types of primers used for metallic cartridges are:
   a. rimmed and rimless.
   b. Berdan and Boxer. (pp. 13, 14 and Lesson II)
   c. battery cup and tapered cup.
   d. standard and magnum.

4. Powder and primers:
   a. should be stored together in the same cabinet in their original factory containers.
   b. should be stored away from heat and exposure to open flame.
   c. should be stored so that children and other unauthorized persons do not have access to them.
   d. all of the above
   e. b and c only (p. 7 and Lessons I and II)

5. If you buy or are given powders or primers in non-factory containers, such as coffee cans, these components:
   a. can be used safely if the containers are clearly marked as to their contents.
   b. can be used safely if the charge weights are reduced by 10%.
   c. should never be used to reload cartridges. (p. 6 and Lesson I)
   d. both a and b
6. Eye protection should be worn:
   a. only when priming cases.
   b. only when actually working the reloading press.
   c. **whenever working with reloading components. (p. 5 and Lesson I)**
   d. only when shooting; it is not required during reloading.
   e. both a and b

7. It is permissible to eat at the reloading bench:
   a. as long as you do not handle food or drink with the same hand you handle components with.
   b. as long as you drink with a straw and eat with safety gloves.
   c. as long as you eat or drink from closed containers.
   d. **never. (p. 7 and Lesson I)**
   e. both a and c

8. Of the following, which is not reloadable?
   a. a centerfire pistol cartridge
   b. a centerfire rifle cartridge
   c. **a rimfire cartridge (p. 9 and Lesson I)**
   d. a shotgun shell

9. Reloading:
   a. enables a shooter to save money on ammunition.
   b. is a way to make ammunition tailored to a specific gun or purpose.
   c. can enhance a shooter's enjoyment of the shooting sports.
   d. protects the environment by recycling cartridge components.
   e. **all of the above (p. ix and Lesson I)**

10. During the firing process:
    a. the cartridge is driven slightly forward in the chamber by the impact of the firing pin.
    b. the case walls expand tightly against the chamber walls.
    c. the case head is forced rearward against the breechface, stretching and thinning the case walls just forward of the web area of the case head.
    d. **all of the above (pp. 2, 3, Figs. 2 & 2A and Lesson I)**

11. Put the following metallic cartridge reloading steps in the proper sequence:
    a. priming, powder charging, sizing, crimping, bullet seating
    b. resizing, depriming, wad seating, powder charging, bullet seating
    c. **resizing, decapping, priming, powder charging, bullet seating (p. 3 and Lesson I)**
    d. resizing, powder charging, bullet seating, repriming, crimping
12. Trimming metallic cartridge cases with a case trimmer is necessary because:
   a. cases can stretch as a result of the firing process.
   b. cases can stretch as a result of being resized.
   c. cases can stretch after prolonged cleaning in a vibratory or tumbler-type case cleaning machine,
   d. all of the above
   e. a and b only (p. 44 and Lesson IV)

13. Case cleaning machines can be used to clean:
   a. brass cases. (p. 46 and Lesson IV)
   b. primers.
   c. live ammunition.
   d. all of the above
   e. a and c only

14. Applying case sizing lubricant to the shoulder of a bottleneck cartridge case:
   a. can best be done using cotton swabs.
   b. makes it easier for the case to enter the sizing die.
   c. can cause dents in the shoulder during resizing, and thus should be avoided. (pp. 53, 54 and Lesson V)
   d. both a and b

15. Cases should be organized in batches to:
   a. reduce the likelihood of reloading errors.
   b. increase reloading efficiency.
   c. increase reloading speed.
   d. all of the above (p. 51 and Lesson V)
   e. b and c only

16. Case length gauges can be used to:
   a. measure case length.
   b. determine whether case diameter has been resized to the proper dimension.
   c. determine whether a bottleneck case has been sufficiently resized to give proper headspace.
   d. all of the above (p. 55)
   e. a and b only

17. Hard primer seating can be the result of:
   a. a remaining primer pocket crimp, as on military cases.
   b. misalignment of the primer in the primer pocket.
   c. use of the wrong size primer.
   d. all of the above (p. 58)
   e. b and c only
18. When reloading, you should:
   a. refrain from eating or smoking.
   b. avoid using alcohol or drugs.
   c. beware of fatigue.
   d. never mix powders.
   e. all of the above (pp. 6, 7, 107 and Lesson I)

19. Additional information on reloading can be obtained from:
   a. materials from the National Reloading Manufacturers Association (NRMA) and its members.
   b. reloading clinics sponsored by gun shops.
   c. gun clubs.
   d. all of the above (pp. 105,)

20. When measuring powder charges using a powder measure alone:
   a. every 10-20 rounds, check the accuracy of the measure by weighing the thrown powder charge with a scale.
   b. consistent technique is necessary to ensure consistency in the thrown charges.
   c. only charges below maximum should be thrown.
   d. all of the above (p. 61 and Lesson V)
   e. a and b only

21. When inspecting pistol cases, they should always be discarded if:
   a. they have splits or loose primer pockets (pp. 65, 66 and Lesson V)
   b. they are too long.
   c. they have a dent in the case mouth.
   d. all of the above
   e. a and c only

22. Failing to seat primers fully to the bottom of the primer pocket can cause:
   a. erratic ignition. (pp. 74 and Lesson V)
   b. unsafe chamber pressures.
   c. cracked or split cases.
   d. all of the above

23. Variations in the charges thrown by a powder measure can be caused by:
   a. the technique of the powder measure operator.
   b. the size and shape of the powder granules.
   c. the design of the powder measure.
   d. all of the above (p. 61)
24. Fine-tuning a load may involve:
   a. dividing the interval between the starting powder charge and the maximum powder charge into several steps, and loading five rounds for each step.
   b. examining fired cases for signs of high pressure.
   c. interchanging different bullets of the same weight and diameter as the original bullet specified in the published loading data.
   d. all of the above
   e. a and b only (pp. 84-86 and Lesson III)

25. Excessive chamber pressures can result from:
   a. seating the bullet too deeply.
   b. seating the bullet too far out.
   c. applying too much crimp to the case mouth.
   d. all of the above (pp. 63, and Lesson V)
   e. a and c only

26. A double charge of powder:
   a. can occur only when using a powder measure.
   b. can be detected visually by using light shining into the case mouths at an angle.
   c. can be detected by using a depth gauge, such as a marked piece of dowel rod.
   d. all of the above
   e. b and c only (p. 62 and Lesson V)

27. When reading a typical beam-type reloading scale, the gradations on the left side of the beam are typically in____—grain increments, while the gradations on the right are in____—grain increments.
   a. 5, 1
   b. 10, 1
   c. 10, .1
   d. 5, .1 (p. 42)

28. The components of a metallic cartridge are:
   a. case, powder, bullet, and crimp.
   b. powder, primer, case, and cannelure.
   c. case, primer, powder, and bullet. (p. 9 and Lesson II)
   d. brass, powder, slug, primer, and wad.

29. The five types of metallic cartridge case heads are:
   a. rimmed, rimless, beltedless, rimmed belted, and rebated rimless.
   b. rimmed, rebated rimmed, belted rimmed, semi-rimmed, and rebated semi-rimmed.
   c. rimmed, semi-rimmed, rimless, rimless belted, and rebated rimless. (p. 11, 12 and Lesson II)
   d. rebated rimless, belted rimless, belted rimmed, semi-rimmed, and belted semi-rimmed.
30. Which of the following is true?
   a. Although large pistol and large rifle primers are the same size, they cannot be used interchangeably.
   b. Smokeless powder must never be substituted for black powder or Pyrodex®.
   c. Ammonia-based solvents should not be used for cleaning metallic cartridge cases.
   d. all of the above (pp. 6, 14, 51 and Lessons II and VI)
   e. a and b only

31. The term *headspace* commonly refers to:
   a. the distance from the breechface to that part of the chamber that stops forward movement of the cartridge.
   b. the slight fore-and-aft play normally present when a cartridge is chambered and the action is closed.
   c. the distance between the case mouth and the case head.
   d. all of the above
   e. a and b only (pp. 2, 12, 13 and Lesson II)

32. Incorrect headspace can cause:
   a. an inability to close the action of a firearm.
   b. excessive stretching of cartridge cases.
   c. rupture or separation of the case at the junction of the case head and case body.
   d. all of the above
   e. a and c only

33. When crimping handgun cartridges:
   a. revolver cartridges generally require a roll crimp.
   b. semi-automatic pistol cartridges that headspace on the case mouth should be given a taper crimp.
   c. both pistol and revolver cartridges should be given a roll crimp.
   d. both a and b (pp. 80 and Lesson V)

34. The three most important goals of reloading are:
   a. safety, consistency and accuracy. (p. 83)
   b. power, accuracy and reliability.
   c. safety, reliability and power.
   d. accuracy, reliability and power.

35. The measure of weight known as a grain is:
   a. equal to \( \frac{1}{7000} \) of a pound. (p. 16)
   b. a unit of measurement used in the metric system.
   c. the approximate weight of an individual particle or granule of powder.
   d. equal to 111000 of a gram.
   e. both b and d
36. The three basic shapes of smokeless powder granules are:
   a. extruded rod, spherical and flake.
   b. spherical, round and disc.
   c. flattened rod, extruded disc and flake.
   d. cylindrical, flake and ball.
   e. both a and d (p. 15 and Lesson II)

37. A sizing die with a carbide ring:
   a. eliminates the need to lubricate cases.
   b. should be adjusted to leave a slight gap between it and the shell holder when the ram is fully raised.
   c. should be adjusted to touch the shell holder when the ram is fully raised.
   d. produces more accurate ammunition.
   e. both a and b (p. 39 and Lessons V and VI)

38. Boxer primers:
   a. are widely used in the United States.
   b. can be interchanged with Berdan primers.
   c. have an anvil.
   d. all of the above
   e. both a and c (p. 13 and Lesson II)

39. If unusual resistance is encountered in seating a primer:
   a. apply more force to ensure the primer enters the primer pocket all the way.
   b. gently tap the case to ensure proper primer alignment, then try again to seat the primer.
   c. stop all attempts to seat the primer and find out what is wrong. (p. 13 and Lesson V)
   d. use a sharp tool to enlarge the primer pocket,
   e. both band d

40. A dial caliper is normally used in reloading to measure:
   a. the length of the cartridge case.
   b. the length and diameter of the bullet.
   c. overall cartridge length.
   d. all of the above (p. 44 and Lesson IV)

41. Excessive pressures can sometimes be caused by:
   a. seating the bullet too deeply or too far out.
   b. using more than the maximum or less than the minimum amount of powder listed in the manual.
   c. mixing different types of smokeless powders.
   d. substituting different bullets of the same weight and nominal diameter.
   e. all of the above (pp. 16, 33, 63, 86 and Lessons I, III and V)
42. For a given cartridge, powder, primer and bullet, the maximum published load:
   a. will be the same in all the reloading manuals.
   b. allows a safety margin of 10%, and thus can be safely exceeded slightly by the
      careful reloader.
   c. should be reduced by 2% to arrive at a starting load.
   d. **should never be exceeded under any circumstances.** (pp. 33, 87 and Lesson I)
   e. both c and d

43. Specific instructions for setting up your handloading press and dies:
   a. **can be found in the instructions accompanying the equipment.** (pp. 49, 53 and Lesson V)
   b. can be obtained from the National Rifle Association.
   c. can be obtained from the Sporting Arms and Ammunition Manufacturers’ Institute.
   d. all of the above

44. Powder can safely be disposed of by:
   a. burning it in the open, in small shallow piles not more than 1” high and one
      pound in weight, ignited at a distance using a fuze or powder train (if permitted
      by local laws).
   b. taking it to a hazardous waste disposal facility.
   c. using it as fertilizer, if dispersed widely (if permitted by local laws).
   d. **all of the above** (p. 18 and Lesson II)
   e. a and b only

45. The reloader should have more than one reloading manual because:
   a. it is always more prudent to compare loads from different manuals.
   b. there is no one best manual.
   c. some manuals may not contain data for the cartridge being reloaded or the
      specific components being used.
   d. **all of the above** (pp. 32, 33 and Lesson III)

46. Maximum chamber pressure standards are established by the:
   a. National Rifle Association of America (NRA).
   c. **Sporting Arms and Ammunition Manufacturers’ Institute**
      (SAAMI). (p. 30 and Lesson III)

47. When you are finished reloading, you should:
   a. store all reloading components so that children and other unauthorized persons cannot
      have access to them.
   b. return any unused reloading components to their original factory containers.
   c. wash your hands and face.
   d. **all of the above** (p. 7 and Lesson I)
48. When cartridge cases are longer than the maximum length specified in the reloading manual:
   a. they should always be discarded.
   b. they should be trimmed to the proper length. (pp. 44, 55, 71 and Lesson IV)
   c. the bullet should be seated slightly deeper to compensate.
   d. the sizing die should be adjusted to compensate.

49. Neck sizing:
   a. may result in longer case life.
   b. may result in greater accuracy.
   c. always requires a special neck sizing die.
   d. all of the above
   e. a and b only (p. 39 and Lessons IV)

50. The reloader should:
   a. understand each step of the reloading process and why each step is done in a specific way.
   b. eliminate distractions in order to be able to concentrate on his or her work while reloading.
   c. establish a system of checks and inspections for every reloading step.
   d. all of the above (p. 6, Lesson I and NRA Basic Metallic Cartridge Reloading Wall Chart #1)
   e. a and b only
51. Reloading accidents are primarily caused by:
   a. defective or worn reloading equipment.
   b. a combination of ignorance and carelessness. (p. 5 and Lesson I)
   c. errors in reloading manuals.
   d. manufacturing defects in reloading components.

52. Modern shotgun shell cases:
   a. are most often made of plastic.
   b. must be positively identified regarding the specific gauge, brand
      and type of case, before they are used for reloading.
   c. may have defects not visible on the exterior of the shell.
   d. all of the above (p. 20, 95, 96 and Lessons II and V)

53. The type of primer used in shotgun shells is known as a:
   a. large rifle primer.
   b. Berdan primer.
   c. Boxer primer.
   d. battery cup primer. (p. 22 and Lesson II)

54. Shotgun shells loaded with slugs:
   a. may require a different type of crimping die than that used for shot loads.
   b. must be reloaded using data, components and techniques specifically for slug loads.
   c. must be assembled using high-brass hulls only.
   d. all of the above
   e. a and b only (p. 28 and Lesson II)

55. Powder and primers:
   a. should be stored together in the same cabinet in their original factory containers.
   b. should be stored away from heat and exposure to open flame.
   c. should be stored so that children and other unauthorized
      persons do not have access to them.
   d. all of the above
   e. b and c only (p. 7 and Lesson I)
56. If you buy or are given powders or primers in non-factory containers, such as coffee cans, these components:
   a. can be used safely if the containers are clearly marked as to their contents.
   b. can be used safely if the charge weights are reduced by 10%.
   c. **should never be used to reload shotgun shells or metallic cartridges. (p. 6 and Lesson I)**
   d. only when shooting; it is not required during reloading.
   e. both a and b

57. Eye protection should be worn:
   a. only when priming cases.
   b. only when actually working the shotgun shell reloader.
   c. **whenever working with reloading components. (p. 5 and Lesson I)**
   d. both a and b

58. Is it permissible to eat at the reloading bench?
   a. as long as you do not handle food or drink with the same hand you handle components with.
   b. as long as you drink with a straw and eat with safety gloves.
   c. as long as you eat or drink from closed containers.
   d. **never. (p. 7 and Lesson I)**
   e. both a and c

59. Of the following, which is not reloadable?
   a. a centerfire pistol cartridge
   b. a centerfire rifle cartridge
   c. **a rimfire cartridge (p. 9 and Lesson I)**
   d. a shotgun shell

60. Reloading:
   a. enables a shooter to save money on ammunition.
   b. is a way to make ammunition tailored to a specific gun or purpose.
   c. can enhance a shooter's enjoyment of the shooting sports.
   d. protects the environment by recycling cartridge components.
   e. **all of the above (p. ix and Lesson I)**

61. Shot charges for shotgun shells are measured in:
   a. grams.
   b. dram equivalents.
   c. grams.
   d. **ounces. (p. 24 and Lesson III)**
   e. none of the above
62. Put the following shotgun shell reloading steps in the proper sequence:
   a. priming, powder charging, resizing, crimping, wad seating
   b. resizing, depriming, wad seating, powder charging, shot charging, crimping
   c. resizing, decapping, priming, powder charging, wad seating, shot charging, crimping (p. 4, 5 and Lesson I)
   d. resizing, decapping, priming, powder charging, shot charging, wad seating, crimping

63. The typical shotgun shell reloader [as shown on p. 90 of the NRA Guide to Reloading]:
   a. measures shot and powder volumetrically.
   b. will produce only a roll crimp.
   c. features canisters for powder and shot pellets.
   d. all of the above
   e. a and c only (pp. 90, 91 and Lesson IV)

64. In shot charges of lead and steel shot of the same weight and shot size [refer to tables on pp. 25-26 of the NRA Guide to Reloading]:
   a. there will be more steel pellets than lead pellets. (pp. 25-26)
   b. there will be more lead pellets than steel pellets.
   c. there will be equal numbers of lead and steel pellets.
   d. the number of pellets depends upon the type of wad used.
   e. the number of pellets depends upon the type of wad and case used.

65. Steel shot loads
   a. can be assembled using data for lead shot pellets if the charge weights are reduced 10%.
   b. are required by federal law for all waterfowl hunting.
   c. require components, tools and data designed specifically for assembling steel shotgun shell loads.
   d. all of the above.
   e. b and c only (p. 26 and Lesson II)

66. High brass plastic shotgun shells:
   a. can be reloaded a greater number of times than low brass hulls.
   b. are stronger than low brass cases.
   c. are functionally the same as low brass hulls. (pp. 21, 22 and Lesson II)
   d. produce higher velocities than low brass hulls.

67. Buffered shot loads:
   a. can be assembled using regular shotshell load data, as long as the same size shot is used.
   b. protect the shot pellets from deformation during their acceleration down the barrel.
   c. helps the shot charge flow through the choke area of a shotgun barrel.
   d. all of the above.
   e. b and c only (p. 27 and Lesson II)
68. During reloading, shotgun shells are crimped with:
   a. a six-fold crimp.
   b. a taper crimp.
   c. a roll crimp.
   d. **the same type of crimp as the original factory crimp.** (p. 91 and Lesson V)

69. Hard primer seating can be the result of:
   a. use of the wrong wad
   b. **misalignment of the primer in the primer pocket.** (p. 98 and Lesson V)
   c. failure to lubricate the primer with oil.
   d. both b and c

70. Additional information on reloading can be obtained from:
   a. pamphlets, books, videos and other materials from the National Reloading Manufacturers Association (NRMA) and its members.
   b. reloading clinics sponsored by gun shops.
   c. gun clubs.
   d. **all of the above** (pp. 105, 106)

71. Shot pellet sizes:
   a. **are designed using a system of numbers and letters.** (pp. 24, 25 and Lesson II)
   b. are designated by different numbering systems for soft lead, plated and steel shot.
   c. are designated by the shot pellet diameter in millimeters.
   d. both a and b

72. The **dram equivalent** rating of a shotgun shell:
   a. refers to the weight of powder in grains used in each shell.
   b. **refers to the power of a modern shotgun shell compared to obsolete black powder shells.** (p. 23 and Lesson III)
   c. refers to the weight of the shot charge in a shotgun shell.
   d. can be used to weigh out charges of smokeless powder.

73. When seating shotgun shell primers:
   a. they should bottom in the primer pocket of the case.
   b. they should sit flush with, or slightly below, the level of the face of the case head.
   c. the use of too much force can result in primer ignition.
   d. **all of the above** (p. 98 and Lessons II and V)

74. The term **gauge** used in relation to shotgun shells signifies:
   a. the diameter of the shot pellets or slug.
   b. the degree of choke.
   c. **the diameter of the bore.** (p. 147 and Lesson II)
   d. the length of chamber.
75. Working up a shotgun shell load may involve:
   a. substituting different shotgun powders for the specific powder listed in the reloading manual.
   b. trying different wads than the one specified in the reloading manual.
   c. interchanging different sizes of shot for a given shot charge weight.
   d. none of the above, as shotgun shell loads are never worked up (p. 103 and Lesson ID)

76. When reading a typical beam-type reloading scale, the gradations on the left side of the beam are typically in _____-grain increments, while the gradations on the right are in _____-gram increments.
   a. 5, 1
   b. 10, 1
   c. 10, .1
   d. 5, .1(p. 42)

77. The components of a shotgun shell can include:
   a. hull, powder, primer, bullet, and crimp.
   b. hull, primer, powder, wad, shot pellets.
   c. case, primer, powder, cannelleur and shot pellets.
   d. case, powder, slug, primer and wad.
   e. both b and d (p. 19 and Lesson I)

78. The term headspace commonly refers to:
   a. the distance from the breechface to the part of the chamber that stops forward cartridge movement.
   b. the small amount of fore-and-aft play normally present when a cartridge is chambered and the action is closed.
   c. the distance between the case mouth and the case head.
   d. all of the above
   e. a and b only (pp. 2, 12, 13 and Lesson II)

79. The three most important goals of reloading are:
   a. safety, consistency and accuracy.(p. 83 and Lesson I)
   b. powder, accuracy and reliability.
   c. safety, reliability, and power.
   d. accuracy, reliability, and power.

80. The measure of weight known as a grain is:
   a. equal to 1/7000 of a pound. (p. 16 and Lesson III)
   b. a unit of measurement used in a metric system.
   c. the approximate weight of an individual particle or granule of powder.
   d. equal to 1/1000 of a gram.
   e. both b and d
81. The three basic shapes of smokeless powder granules are:
   a. extruded rod, spherical and flake.
   b. spherical, round and disc.
   c. flattened rod, extruded disc and flake.
   d. cylindrical, flake and ball.
   e. both a and d (p. 15 and Lesson II)

82. If unusual resistance is encountered in seating a primer:
   a. apply more force to ensure the primer enters the primer pocket all the way.
   b. gently tape the case to ensure proper primer alignment, then try again to seat the primer.
   c. stop all attempts to seat the primer and find out what is wrong. (p. 13 and Lesson V).
   d. use a sharp tool to enlarge the primer pocket.

83. For a given combination of hull type, wad type, powder, primer and weight and type of shot, the maximum published load:
   a. will be the same in all the reloading manuals.
   b. allows a safety margin of 10%, and thus can be safely exceeded slightly by the careful reloader.
   c. should be reduced by 2% to arrive at a starting load.
   d. should never be exceeded under any circumstances. (p. 33 and Lesson ID)
   e. both c and d

84. Specific instructions for adjusting your shotgun shell loader (as for wad pressure or crimping):
   a. can be found in the instructions accompanying the loader. (p. 101 and Lesson V)
   b. can be obtained from the National Rifle Association.
   c. can be obtained from the Sporting Arms and Ammunition Manufacturers' Institute.
   d. all of the above

85. Powder can safely be disposed of by:
   a. burning it in the open, in small shallow piles not more than 1” high and one pound in weight, ignited at a distance using a fuze or powder train (if permitted by local laws).
   b. taking it to a hazardous waste disposal facility.
   c. using it as fertilizer, if dispersed widely (if permitted by local laws).
   d. all of the above (p. 18 and Lesson II)
   e. a and b only

86. Each completed reloaded shotgun shell should be inspected for:
   a. a proper crimp.
   b. a case free of cracks or other defects.
   c. a properly seated primer.
   d. all of the above. (p. 102 and Lesson V)
87. The reloader should have more than one reloading manual because:
   a. most manuals contain serious errors.
   b. there is no one best manual.
   c. even with the exact same load, the levels of performance and pressure listed in different manuals may vary.
   d. all of the above
   e. b and c only (p. 32, 33 and Lesson III)

88. Maximum chamber pressure standards are established by the:
   a. National Rifle Association (NRA).
   b. National Reloading Manufacturers Association (NMRA).
   c. Sporting Arms and Ammunition Manufacturers’ Institute (SAAMI). (p. 30 and Lesson III)

89. When you are finished reloading, you should:
   a. store all reloading components so that children and other unauthorized persons cannot have access to them.
   b. return any unused reloading components to their original factory containers.
   c. wash your hands and face.
   d. all of the above (p. 7 and Lessons V)

90. A reloading bench:
   a. must be at least five feet long.
   b. must be made of metal with welded joints.
   c. should be kept clean and uncluttered. (p. 7 and Lesson I)
   d. should have wheels on all legs for easy mobility.

91. The reloader should:
   a. understand each step of the reloading process and why each step is done in a specific way.
   b. eliminate distractions in order to be able to concentrate on his or her work while reloading.
   c. establish a system of checks and inspections for every reloading step.
   d. all of the above (p. 6 and Lesson I)

92. Lead shot is plated:
   a. to reduce pellet deformation. (p. 26 and Lesson II)
   b. to prevent rusting.
   c. to lower air resistance and thus fly faster and farther.
   d. to be more visible in flight.

93. Steel shot:
   a. may produce sharp pressure changes from slight variations in components, with the same powder charge weight. (pp. 26, 27)
   b. can be reloaded using data for the closest size of lead shot.
   c. can be reloaded using data for the closest weight of lead shot.
   d. always requires a buffer.
94. The purpose of the wad is to:
   a. seal propellant gases.
   b. cushion the shot pellets.
   c. fill space in the case to allow proper crimping.
   d. all of the above (p. 24 and Lesson II)

95. All shotgun shells feature:
   a. a crimp.
   b. a brass head.
   c. a rim.
   d. all of the above
   e. a and c only (pp. 20, 21 and Lesson II)

96. The four types of lead shot are:
   a. magnum, hard, shot and super-soft.
   b. magnum, hard, steel and plated.
   c. hard, soft, drop and plated.
   d. soft, chilled, hard and plated. (p. 25, 26 and Lesson II)

97. When reloading you should:
   a. refrain from eating or smoking.
   b. avoid using alcohol or drugs.
   c. beware of fatigue.
   d. all of the above. (pp. 6, 7 and Lesson I)

98. Old-style shotgun shell primers lacking a paper or foil covering over the flash hole:
   a. can be used if they have not been exposed to solvents, oils or moisture.
   b. can be used if the powder charge weights are reduced 10%.
   c. should not be used, as powder can get inside such primers and cause excessive pressure. (p. 22 and Lesson II)
   d. both a and b

99. Volumetrically-measured powder charges used to reload shotgun shells:
   a. are measured using powder bushings.
   b. should be verified by weighing several thrown charges on a reloading scale.
   c. can vary depending upon powder density, humidity, the technique of the reloader, and other factors.
   d. all of the above. (pp. 93, 94 and Lesson IV)

100. The different varieties of powders used to reload shotgun shells:
    a. cannot easily be identified by their appearance.
    b. have different burning rates, and thus cannot be mixed.
    c. must never be substituted for black powder or Pyrodex®
    d. none of the above. (p. 16 and Lesson II)
    e. both b and c