

Reloading A to Z

Test Questions:

1. A cartridge is the primer, powder and projectile in a convenient form.
 - a. T
 - b. F
2. What form of primers are most popular in the United States?
 - a. Cup
 - b. Berdan
 - c. Boxer
3. Where did Berdan Primers originate?
 - a. The United States
 - b. Europe
 - c. Australia
 - d. South America
4. Any old primer will do when making up my reloads.
 - a. True
 - b. False
5. Name the three basic types of gun powder used in modern cartridges:
 - a. Flake, Ball, Tubular
 - b. Flake, Rod, Ball
 - c. Rod, Powder, Granular
 - d. Ball, Granular, Flake
6. Modern smokeless gun powder has a coating to help control the burn rate.
 - a. True
 - b. False
7. The shape of the powder kernels effect the burn rate of the powder.
 - a. True
 - b. False
8. What is the advantage or round nosed bullets in semi-auto pistols?
 - a. They don't corrode
 - b. Reduce over-penetration
 - c. Larger wound cavity
 - d. They feed well.
9. What is a "Hardball", when referring to bullets?
 - a. A round nosed full metal jacketed bullet
 - b. A jacketed round ball
 - c. A solid copper ball
 - d. A hard copper round nose bullet
10. Semi-Wadcutter bullets are generally not very accurate.
 - a. True
 - b. False
11. What is the purpose of the circumference grooves in a cast lead bullet?
 - a. A place to crimp the bullet

- b. A place to hold bullet lube and reduce friction
 - c. The grooves clean the bore when fired
 - d. The grooves improve aerodynamics of the bullet
 - e. None of the above.
 - f. All of the above
12. What is the canelure (groove) on jacketed bullets for?
- a. Crimping the case mouth to prevent the bullet moving under recoil.
 - b. Holding bullet lube
 - c. Headspaceing the cartridge
 - d. Keeps the copper jacket and the lead core from separating on impact
13. The purpose of the hollow base on a full wadcutter bullet is:
- a. To allow the bullet to obdurate easily into the lands and grooves of the barrel.
 - b. It's these so you can make your own tracer rounds.
 - c. Because when you load them backwards they look cool.
 - d. It increases case capacity.
14. Bullet lube on cast lead bullets is used to help minimize fouling in the bore.
- a. True
 - b. False
15. A gas check added to a cast lead bullet allows jacketed bullet velocity without fouling the barrel.
- a. True
 - b. False
16. The relationship of the base of the bullet to the body (uniform/non-uniform) is not critical to produce the best accuracy.
- a. True
 - b. False
17. If gases are able to vent unevenly as the bullet exits the muzzle of the guns accuracy will suffer.
- a. True
 - b. False
18. What are thin jackets on bullets good for?
- a. They are fast expanding, best used on thin skinned game like varmints.
 - b. Protecting the bore from fouling
 - c. Slow expansion
 - d. Warm weather shooting
19. What is the value of a long tapered ogive on a rifle bullet?
- a. Sexy looks
 - b. Easier to work with when reloading
 - c. Generally provide better accuracy at long ranges
 - d. Easier to manufacture
20. Soft lead tips on jacketed bullets serve what purpose(s)?
- a. They can be used as a pencil in a pinch
 - b. Jacket material is harder to form so the lead makes a nice sharp tip
 - c. It hides any defects at the nose of the bullet
 - d. The exposed lead aids in the expansion of the bullet at a wider rang of velocities
 - e. All of the above
 - f. None of the above

21. Increasing velocities resulted in boat tail bullets being developed to improve accuracy and extend the accurate range of the bullet.
- True
 - False
22. What is the name for the tapered part of the rifle bullet ahead of the parallel bore contact surface?
- Slope
 - Taper
 - Nose
 - Ogive
23. What feature of a bullet can be used to overcome drag or improve retained velocity and improve accuracy over a longer range.
- Polymer tip
 - Ogive
 - Base
 - Boat tail
24. Why would you select a bonded core bullet for your load?
- Bragging rights
 - Because if it's bonded is has to be better
 - Higher velocity potential
 - Better retained weight
25. Reloading provides an opportunity to make up loads that commercial manufacturers do not offer.
- True
 - False
26. Rimmed cartridges are seldom used in revolvers and single shots.
- True
 - False
27. Rimless cartridges have an extractor groove and the rim is never larger than the body diameter of the case.
- Most of the time
 - Always
 - Duh, that's why we call them rimless
 - For faster manufacturing
28. Rimmed cases headspace on the thickness of the rim.
- True
 - False
29. What does the acronym SAAMI stand for?
- Sporting Ammunition of America Makers Industry
 - Sporting Arms & Ammunition Manufactures' Institute
 - Specialized Armament & Assault Manufacturers Institute
 - Society of Arms Association and Manufacturers Industry
30. SAAMI creates and publishes industry standards for headspace of firearms and cartridges.
- True
 - False

31. What is a Datum line on a rimless bottle-neck cartridge?
- The imprint on the case head
 - The junction of the neck and shoulder
 - The front edge of the extractor groove on the case
 - A specified point along the shoulder
32. Belted cases headspace on the shoulder of the case.
- True
 - False
33. Berdan primers require cases that are manufactured just for their use.
- True
 - False
34. Cartridge cases that are made to use Berdan primers will have:
- Extra long necks
 - Multiple flash holes
 - The anvil as part of the case
 - Weak case walls
 - Both b and c
35. Boxer primed cases only have one flash hole in the center of the primer pocket.
- True
 - False
36. The Berdan priming system was design by an engineer in Canada
- True
 - False
37. Most breeches have an ejector cut in some form. Why does that matter?
- If the case won't eject the gun can malfunction
 - The marks left from the ejector cut on the breech face are an indication of excessive pressure.
 - Because it is the cheapest way for a manufacture to make them
 - All of the above
38. Fit of the firing pin in the firing pin hole of the bolt must be closely fit:
- For accuracy
 - For reliability
 - To prevent primer damage
 - To protect the shooter
 - All of the above
 - None of the above
39. Is case wall thickness the same from the solid head all the way to the case mouth?
- Yes
 - No
 - Depends on the maker
40. Name the parts of a rimless bottle neck cartridge case:
- Solid Head
 - Web
 - Body/Shoulder
 - Neck
 - All of the above

41. Will accurate loads more commonly have a high or a low load density?
- High
 - Low
42. In order to preserve case capacity the bullet should not be seated too far below the junction of the neck and shoulder.
- True
 - False
43. Neck tension on the bullet does not affect accuracy.
- True
 - False
44. What is "over bore"?
- Too much case capacity for the diameter of the bore
 - Where the sights are mounted
 - Cartridges with heavy recoil
 - Term for chambers that have been cut too large
45. Factory and/or resized cases are never smaller than the chamber.
- True
 - False
46. How often is all of the powder consumed during the firing of a cartridge?
- Always
 - Never
 - Rarely
 - One in Fifty
47. During firing, cartridge brass expands to match the dimensions of the chamber.
- True
 - False
48. Factory loaded ammunition is perfect and exactly matches the chamber of the gun it was designed for.
- True
 - False
49. Brass has certain properties that make it ideal for cartridge cases. What are they?
- The ability to contain pressure
 - Elasticity
 - Memory
 - All the above
 - None of the above
50. The only cause of case head separations is Excessive Headspace, either in the gun or the ammunition (or both).
- True
 - False
51. Why do you need to understand Headspace methods?
- If the gun was incorrectly manufactured we will be able to tell
 - Because when reloading we can cause headspace if we set-up the dies incorrectly
 - So we can set-up to remove any headspace to improve accuracy if desired
 - A & C

e. B & C

52. The condition of a fired primer can be misleading when you're trying to diagnose pressure problems.
- True
 - False
53. There are no tools that will allow the average reloader to measure pressure of loads in their personal firearms.
- True
 - False
54. Excessive pressure can result in:
- Ruptured cases
 - Pierced primers
 - Unnecessary wear on the firearm
 - Spontaneous disassembly of the firearm
 - All of the above
55. A good ball park figure (estimate) for how much velocity you might gain or lose with an inch of barrel length is:
- 100 fps
 - 55 fps
 - 25 fps
 - 75 fps
56. Knowing what components, barrel, and barrel length that were used by the maker of the manual can be useful information when trying to pick out a load from a manual to test in your gun.
- False
 - True
57. Which type of brass is likely to have the lowest case capacity due to its construction?
- Remington
 - Winchester
 - Starline
 - Military
 - Norma
58. Why do we use the starting loads in the reloading manuals?
- Because I like my guns
 - For safety
 - Because starting loads are normally safe in any gun
 - Because we are working with a new gun
 - All of the above
59. What information do the publishers of reloading manuals use to insure their data does not exceed safe pressure limits?
- Powder manufacturers' tests
 - SAAMI maximum pressure limits.
 - Gun manufacturers' recommendations
 - U.S. Government Laboratory guidelines
60. What does C.U.P. stand for?
- Copper Units of Pressure
 - Chamber Units of Pressure
 - Crusher Units of Pressure
 - Cup Units of Pressure

61. C.U.P and P.S.I. are not interchangeable terms.
- True
 - False
62. What does P.S.I. stand for?
- Pressure Safety Index
 - Practical Solution Indices
 - Pounds per Square Inch
 - Permissible Sonic Inhibitor
63. Historical reloading manuals are useful for data that is not currently in print, but should not be substituted for a modern manual if available for the same cartridge.
- True
 - False
64. Reloading manuals rarely have dimensions for cartridges provided for your convenience.
- True
 - False
65. Why is record keeping valuable for the reloader?
- To record results for future reference
 - To avoid duplicating experiments
 - Helps with making decisions after range testing
 - So that you will know if your results make sense
 - All the above
66. How many grains of powder do you increase when adjusting a load?
- $\frac{1}{2}$ grain
 - 1 grain
 - 2 grains
 - $1\frac{1}{2}$ grain
67. What is the value/advantage of a chronograph?
- Knowing the velocity of your load allows you to calculate trajectory either from tables or software.
 - Knowing the velocity helps us know when we are approaching maximum pressure because pressure and velocity are directly related.
 - We can tell if the cartridge manufacturers' velocity figures are accurate
 - We will know if the powder manufacturers are being too careful with their maximum loads
 - A, B, C
68. Magnum primers are never recommended for use with Ball type powders to achieve more reliable and uniform ignition.
- True
 - False
69. Switch between magnum and standard primers for any given load you should:
- Say a prayer
 - Write to the maker for permission
 - Chronograph the load
 - Reduce the load for safety
70. Accuracy is more important than velocity.
- True
 - False

71. Reloading is limited to big expensive tools and a fancy reloading bench.
- True
 - False
72. Single stage reloading presses come in different styles, which are correct:
- 'O' Frame
 - 'C' Frame
 - Multi stage (station)
 - Turret
 - All of the above
73. Why are shell holders separate items from the reloading press?
- So the reloading companies can make more money
 - Because variety is the spice of life
 - To allow the reloader lots of choices
 - To make the press a universal tool that can load many calibers
74. Some presses have a bushing mounted where the die threads in. What is the purpose of this bushing?
- To lubricate the dies
 - To allow the use of larger diameter dies
 - For quick change of the dies
 - To make rebuilding a worn press possible
 - B & C
75. What thread is commonly used on modern reloading dies.
- 5/8"x24
 - 1"x12
 - 1"x14
 - 7/8"x14
76. Turret presses allow you to keep many dies set up in the press for quick change from one die or caliber to another.
- True
 - False
77. Progressive reloading presses:
- Are not worth the trouble
 - Seldom produce accurate ammo
 - Can only be used for a single cartridge
 - All of the above
 - None of the above
78. Electronic Scales are insensitive and are relatively unaffected by the environment they are used in.
- True
 - False
79. How many grains of powder in one pound?
- 1600
 - 2400
 - 5600
 - 7000
80. Reloading dies are not interchangeable between brands of reloading presses.
- True
 - False

81. Reloading benches need to be solid and mounted in such a way that they will not move during the reloading process.
- True
 - False
82. Shell holders are interchangeable between brands of reloading presses, but:
- Sometimes they fit poorly
 - Each company has its own numbering system
 - Are totally adjustable
 - Never interchangeable for different cartridges
83. Shell holders are normally retained in the ram of the reloading press by a spring or set screw.
- True
 - False
84. Expander balls are used to make the inside diameter of the case neck correct to retain the bullet with proper tension after resizing.
- True
 - False
85. Full length resizing dies are designed to:
- Stretch the brass to its full length
 - Polish the brass
 - Prevent case head separations
 - Size the brass down to factory dimensions or close to them
86. The de-capping pin must never protrude below the bottom of the resizing die.
- True
 - False
87. In order to avoid bending the de-capping rod, it must be carefully adjusted so as to push the spent primer all the way out of the case but not so low that it allows the expander ball to touch the case head.
- True
 - False
88. What is the purpose of a standard full length resizing die?
- To neck size
 - To return the brass to its basic dimensions so it will fit in any gun chambered for that cartridge.
 - To expand the neck
 - To re-prime the case
89. How can you get the maximum amount of sizing out of the resize die?
- Lubrication
 - Use a Mallet
 - Follow the Die makers instructions for set up
 - Use a big heavy 'O' frame press
90. It is impossible to use standard dies to resize cases to match your chamber's headspace.
- True
 - False
91. Attention to detail will produce better quality reloads. For this reason:
- Set up can take a little time
 - We make incremental adjustments to dies
 - We check the condition of the brass all through the process

- d. We often check the sized brass in the firearm
- e. All of the above

92. We debur the inside of the case mouth to:

- a. Make a cookie cutter
- b. Allow the bullet to enter the case mouth easier
- c. Avoid damage to the bullet
- d. Both b and c

93. Why is consistency in reloading practices important?

- a. Consistency breeds accuracy
- b. So you can switch your brain off while reloading
- c. It avoids errors
- d. It enhances safety
- e. C, D, A

94. Why do cases get stuck in resize dies?

- a. Too much Lubrication
- b. Sizing too fast
- c. Dies are too hot
- d. Too little lubrication

95. Why might a case come out of the resize die with a dent in the shoulder or body?

- a. Entered the die crooked
- b. Too much air pressure in the die
- c. It went in dented
- d. Too much lubrication on the brass

96. Why would you use a "Small Base" resize die?

- a. When the brass will be used in a semi-auto
- b. When you have a large base
- c. To create a belt on a case
- d. To check for web expansion

97. Why do you clean primer pockets?

- a. Why not?
- b. So that the primer will seat properly
- c. Because cleanliness is next to Godliness
- d. To keep dirt from contaminating primers

98. Primers are....

- a. Flammable
- b. Explosive

99. Safety glasses are required for reloading.

- a. True
- b. False
- c. Safety glasses are for sissies

100. Primers should be seated to what depth for best performance?

- a. Between .010" and .015" below flush
- b. Flush
- c. As deep as they will go
- d. Between .001" and .005" below flush

101. If a primer is not seated below flush there is a safety concern.

- a. True
- b. False

102. Inconsistent seating depth of the primer will cause what result?
- Ruptured primers
 - Pierced primers
 - Flat primers
 - Accuracy issues
103. There are few ways that you can seat primers with good results.
- True
 - False
104. The business card test shown in the course allows you a clear and easy visual reference for checking seating depth.
- True
 - False
105. Powder can be measured by volume using:
- Powder Dippers
 - The case as a scoop
 - Just filling the case to the top
 - A teaspoon
106. Powder scales are available in a wide range of prices.
- True
 - False
107. Powder is measured in grains or grams when using scales to check charges.
- That refers to the number of individual little pieces of powder
 - This refers to the weight of the charge
 - It can take a long time to count the little pieces of powder for a big charge
108. Powder measures work by metering powder in what way?
- By weight
 - By volume
 - By trickling
 - Through a funnel
109. Using a micrometer thimble on a powder measure will allow you to:
- Drink more adult beverages while loading
 - Adjust the measure more precisely
 - Switch between powders more quickly
 - Return to the same charge from your reloading records quickly
 - Both B & D
110. The micrometer thimble on a powder measure scale is:
- An extra product you can add to the measure
 - Not correlated to any powder, the numbers are a reference
 - Easy to use
 - Provide fine adjustment of the powder charge
 - All of the above
111. Hold the powder tray from the scale against the pour spout of the powder measure:
- For consistent results
 - To avoid spilling powder
 - To ground out the tray
 - For smooth operation of the measure
 - Both C & D

112. Powder Tricklers are used to get precise powder charges by weight.
- True
 - False
113. Electronic Powder Measures are popular because:
- They are accurate
 - They are fast
 - They are dirt cheap
 - They automate what can be a time consuming job
 - All except C
114. Powder measures can only be mounted one way on the reloading bench.
- True
 - False
115. Rifle seating punches will work with a variety of bullet nose shapes.
- True
 - False
116. What feature on the reloading dies allows you to prevent the dies from moving in the press and potentially changing the way they work the brass.
- Split Nut
 - Lock Nut
 - Threads
 - Shell Holder
117. Reloading manuals often show multiple bullet configurations of the same weight along side matching reloading data. You have a bullet of the same weight, how do you know which data is safe to use?
- It will be in bold print
 - Start with the lightest (starting load)
 - Color coding in the manual
 - My bullet must be pictured
118. When a manual shows multiple bullet designs for the same weight bullet will they all perform exactly as the data indicates?
- They will be similar, (close enough to safely interchange the data)
 - They may vary in results because of contact surface variations
 - Nearly any bullet of the same weight can use published data from any source
 - The ogive can change how the bullet flies down range, but you can interchange bullets of the same weight safely if you start low
 - All of the above
119. Powder measures are notoriously unreliable so you have to weigh and trickle every single charge you load.
- True
 - False
120. What is the best location for your powder scale on the reloading bench?
- Under a dust cover
 - Middle of the bench
 - Wherever seems convenient
 - Eye level
121. It is possible to seat bullets without a crimp, even though the die is made to crimp.
- True
 - False

122. How do you determine correct cartridge overall length (C.O.L.)?
- It's common knowledge
 - Most reloading manuals contain this data
 - Call a friend
 - Ask people in the Internet
123. You can use loading blocks to help keep track of where you are in the loading process. This can be very helpful if you have to take a break for any reason.
- True
 - False
124. Define a "squib" load.
- A cartridge with little or no powder that often allows the bullet to stick in the bore, creating a dangerous situation
 - A load designed for sailors
 - A low power indoor load
 - A low power load with a soft (nonlethal) bullet
125. Can reloading dies be interchanged between brands of reloading presses?
- Yes
 - No
126. In order to crimp a bullet in most reloading dies you:
- Buy a special die
 - Simply follow the directions that come with the dies
 - Make the die touch the shell holder
 - Use longer cases
127. If you over-do the crimp what will happen?
- Just a really deep crimp
 - It will change the seating depth
 - The case may be damaged and made unusable
 - Warning buzzers will sound
128. Details matter for your reloading success.
- True
 - False
129. Reloading with the Lee Loader for straight walled case is:
- Inexpensive
 - Portable
 - Slower than loading on a press
 - Mechanically identical to loading on a press
 - All of the above
130. The extra die in a 3 die set is the (hint: it performs a process unique to straight walled cases:
- Ram Prime Die
 - Bullet Seater Die
 - Shell Sorting Die
 - Expander Die
131. Electronic powder scale/dispensers:
- Speed the process along
 - Are hard to work with
 - Require continual maintenance
 - Are not adjustable

132. What is the best way to avoid errors in reloading?
- Write down your load details
 - Concentrate on what your doing
 - Avoid distractions
 - Use the same order of operation each time
 - All of the above
133. Single stage presses can be single station, multi station, or turret style.
- True
 - False
134. Turret presses can often hold more than one set of dies at a time.
- True
 - False
135. Annealing is the process of hardening brass.
- True
 - False
136. Dry your brass if you quench:
- To protect the primers from water
 - Powder will soak up water and loose its flammability
 - On a tray in the sunshine
 - In the oven at about 150 degrees
 - All of the above
137. Why are we able to quench brass while annealing without causing the brass to harden.
- Brass is hygroscopic
 - Brass, unlike some steels, does not harden via quenching
 - Because we boil the water first to take the hardness out
 - Because we do not get the brass hot enough to cause hardening
138. Brass can be reloaded many times. How many times?
- 43
 - As many as you want
 - Until it turns color
 - Two dozen
 - None of the above
139. What causes brass to stretch?
- Depends on how your load it
 - Depends if you full length resize every time
 - Depends if your gun has excessive headspace
 - Depends on how you set up the reloading dies
 - All the above
140. The process of going back and forth between firing the brass and resizing it causes the brass to become shorter.
- True
 - False
141. Why is the length of your cartridge case a safety concern?
- Short cases are sloppy in the chamber
 - When a case is too long it may be pinched by the end of the chamber, potentially causing a pressure spike
 - So you will buy more reloading tools
 - Because it would affect bullet seating depth
142. As cases grow in length it is never safe to use them until they reach maximum length.
- True

b. False

143. What is the normal amount we trim below the maximum allowed length?

- a. 0.100"
- b. 0.010"
- c. 0.012"
- d. 0.025"

144. Brass that is too short is not a problem if it's only a few thousandths of an inch short, but:

- a. It may allow fouling to develop at the end of the chamber near the throat
- b. It effects case capacity
- c. It can be hard on the reloading dies
- d. Who cares, I just want to go shooting

145. What is the simplest way to trim brass to minimum length?

- a. Have your buddy do it
- b. Buy new brass
- c. With a gauge
- d. A File/Trim die

146. Case trimming is normally performed how often?

- a. Every time you reload
- b. Every other time you reload
- c. About every tenth time you reload
- d. About every five or six times you reload

147. Case trimming is not an essential part of the reloading process.

- a. True
- b. False

148. Dirty brass:

- a. Is unsightly and will embarrass you at the range
- b. Can scratch your reloading dies
- c. Will make your tumbling media turn green
- d. Should be sold at the next gun show

149. Clean brass will:

- a. Look better
- b. Feed better
- c. Extract better
- d. Shine brightly
- e. All of the above

150. Tumbling media must be matched to the type of cartridge cases being cleaned.

- a. True
- b. False

151. When using an ultra-sonic brass cleaner it's a good idea to:

- a. Use an appropriate cleaning solution made for brass
- b. Buy cheap cleaning solution at the dollar store
- c. Run the cleaning cycle for 3 to 5 hours
- d. Use a cotton swab to clean out primer pockets

152. Uniforming primer pockets has what benefit?

- a. Easier cleaning of primer pockets
- b. Longer case life
- c. More flash to the powder

d. Aids in accuracy via uniform seating depth of primers

153. Where can you find data for maximum case length?

- a. At the sporting goods store
- b. On the back of the box
- c. In most reloading manuals
- d. By measuring factory new cases

154. When using a dial caliper to measure, best accuracy comes from:

- a. Holding the tool level
- b. Reading the instructions
- c. Setting a zero first
- d. Being careful to keep the part square to the jaws

155. Case gauges are notoriously unreliable for checking case length.

- a. True
- b. False

156. A dial caliper is the most universal of all case gauges.

- a. True
- b. False

157. Automating any of the case preparation processes like trimming, deburring or flash-hole uniforming can be:

- a. A big time saver
- b. Minimize blisters
- c. Increase useful brass life
- d. Improve accuracy
- e. All the above
- f. None of the above

158. Flash-hole uniforming accomplishes what?

- a. Nothing
- b. Removal of burrs around the flash hole
- c. More uniform flash
- d. Hotter flash
- e. Answers B and C

159. When you're done tumbling brass it's a good idea to:

- a. Shake all the media out of the cases
- b. Unplug the tumbler
- c. Wash the brass to remove polishing compound
- d. Check flash holes to make sure they are clear of media

160. The Shell plate on the Lee Pro 1000 is essentially three shell holders.

- a. True
- b. False

161. The 3 die set in the progressive press is totally different than the one's we used in the single stage press.

- a. True
- b. False

162. Progressive reloading presses are a faster way to reload because:

- a. They have a shorter stroke than other presses
- b. They automate many of the functions of the reloading process
- c. Progressive and Liberal are interchangeable

d. They are made for home use

163. Extended shell holder are used with:

- a. The specific brand of press you are using
- b. Case lube
- c. Mass quantities of brass
- d. Cases that are short, to reduce the stroke length of the press

164. Deburring the brass aids in the die moving in and out of the dies without any unnecessary wear or damage.

- a. True
- b. False

165. All extended shell holders have depriming holes through them.

- a. True
- b. False

166. Redding competition shell holders provide:

- a. Control over headspace
- b. Extra shell holders
- c. Potentially better accuracy
- d. Better speed
- e. Both A and C

167. Ammunition loaded with Redding competition shell holders is intended to:

- a. Be used in the same gun it was fired in previously
- b. Be used in any gun after that
- c. Provide flatter trajectory
- d. Use cast bullets

168. A powder baffle is used in a powder measure so that:

- a. Powder will weigh less
- b. Charges will be more uniform
- c. Sparks cannot enter the hopper
- d. You can smoke while reloading

169. Drop tubes will:

- a. Let you watch the powder drop into the case
- b. Increase reliability of the measure
- c. Look cool
- d. Allow bulky powders to stack better in the cartridge case

170. Dry type neck sizing lubes are used because:

- a. Nobody likes a sticky neck
- b. Lubing the entire case is not necessary when neck sizing
- c. They are less messy and easy to use
- d. Wet lubes are too runny

171. Neck sizing dies

- a. Capitalize on the accuracy of the fire formed case
- b. Are made by nearly all reloading tool makers
- c. Are used in place of the full length sizing die
- d. Still de-cap the case while sizing
- e. All the above

172. Lee Factory crimp dies are used to crimp a bullet with or without a canelure.

- a. True
- b. False

173. Bullet pullers allow you to recycle powder, bullets and cases from loads you do not intend to shoot.
- True
 - False
174. Record keeping is:
- For sissies
 - Only for competition shooters
 - Tedious
 - Useful in saving time and money for any reloader
175. What is the most important thing you should have learned from this course?
- Loading is fun
 - Fred can be a dork sometimes
 - There is nothing else to learn
 - Using safe practices at the reloading bench and the range will insure years of fun
176. When changing variables in any load, only change one thing at a time so you can deduce the result without any confusion over the source of the change.
- True
 - False

Lee Loader

177. Which impact tool would be best suited for use with the Lee Loader or similar reloading system?
- a small sledge hammer
 - a claw hammer
 - a rubber mallet
 - a polymer mallet
178. What is the only adjustment the user can accurately make using the Lee Loader?
- Bullet seating depth
 - Case capacity
 - Crimp engagement
 - Case length
179. Why is a hard stable surface preferred when using the Lee Loader?
- You will use less force during the various striking operations.
 - The die body would roll out of reach on a wood board.
 - You might poke a hole in the surface with the decapping rod.
 - You will lose powder out of the case due to static electricity.
180. What could happen if you mixed up the capping and decapping rods while seating a primer?
- The primer would be seated sideways
 - The de-capping pin could set the primer off.
 - The finished cartridge would tarnish prematurely.
 - It could affect headspace.
181. Because the Lee Loader is so simple and well thought out, there is not much useful information in the instructions.
- True
 - False
182. The Lee Loader can be used to load multiple rifle and pistol calibers interchangeably.
- True
 - False
183. The lee loader is portable.
- True

b. False

184. The dipper that comes in the kit is safe to use with any bullet/powder combination.
- a. True
 - b. False
185. Why is it more important to check every neck you crimp with this tool?
- a. The die has jagged edges that can damage the neck if you don't seat the bullet deep enough.
 - b. Fred will "get you" if you don't.
 - c. The crimp is set with a striking motion and it takes practice to get them to come out the same.
 - d. Rolling taper crimps are notorious for walking.
186. The Lee Loader would be the best choice for a competition/benchrest shooter looking to improve her score.
- a. True
 - b. False

Lee Hand Press

187. What is one major advantage of a hand press?
- a. They do not rust
 - b. They are both portable and affordable
 - c. They are very stable when bolted to a bench
 - d. They can be used as a club
188. What type of frame does the Lee Hand Press have?
- a. O
 - b. Q
 - c. C
 - d. It has no frame
189. What is one major drawback of most hand presses?
- a. You cannot full length size most rifle brass.
 - b. You can only load small and medium sized cartridges.
 - c. Everybody will want to borrow it.
 - d. You cannot achieve acceptable "hunting" accuracy with them.
190. Setting up dies in a hand press involves fewer steps.
- a. True
 - b. False
191. When using the Lee dipper set for powder charges, you should always choose one scoop smaller than you need so it won't matter as much if you leave it heaping a little.
- a. True
 - b. False
192. Using a card to level off a dipper is a good way to increase consistency from pour to pour.
- a. True
 - b. False
193. If you buy a Lee Hand Press, can you use other company's components, i.e. dies and shell holders in it?
- a. Yes
 - b. No
194. Why would a hand press be a good place for a beginner to start reloading?
- a. Hand press manufacturers offer more discounts for college students.
 - b. Hand presses are generally less expensive than bench presses but offer many of the same features
 - c. Bench presses take up too much room.
 - d. They aren't, they are too difficult to use for inexperienced loaders.

Bullet Casting

195. What are some potential hazards posed by molten lead?
- Lead is a corrosive and can dissolve most metal cookware.
 - Molten lead can bleed through softer metals and become lodged in tables.
 - Molten lead is hot enough to start fires, the fumes can be poisonous, and bears are attracted to sizzling sound it makes during the fluxing process.
 - Molten lead is very hot, the fumes can be poisonous, and water can cause violent steam bursts/eruptions.
196. Lead is expensive and hard to find.
- True
 - False
197. Why do modern molds have a plate on the top?
- To keep dust out.
 - To keep the heat in.
 - To cut the sprue off.
 - To keep the lead from bubbling out the top.
198. What are two major elemental contaminants in scrounged lead alloys?
- Dirt and dust
 - Copper and sodium
 - Tin and antimony
 - Zinc and calcium
199. What are two of the most common elements used to improve hardness and casting properties of lead?
- Glass and grease
 - Tin and antimony
 - Zinc and calcium
 - Hydrogen and selenium
200. You can melt lead over a common campfire.
- True
 - False
201. Why do we not see many brass bullet molds?
- Brass is expensive
 - Steel has better thermal qualities to it
 - Aluminum doesn't leave the taste of pennies on the bullets
 - Brass is too soft to make a long lasting bullet mold
202. Why would someone buy "virgin" metals to cast bullets out of?
- To gain more control over the final product.
 - To more easily follow load data.
 - To ensure a better finished product.
 - All the above
 - None of the above
203. The grooves in the sides of lead bullets reduce pressure spikes.
- True
 - False
204. Hardness can be increased by both a chemical process and a physical process.
- True
 - False
205. What is the common scale used to measure lead hardness in the US?
- The Rockwell Scale

- b. The Digital Scale
 - c. The Hardness Scale
 - d. The Brinell Scale
206. What does flux do?
- a. It provides lubrication to the alloy as it enters the mold.
 - b. It helps make the alloy lighter.
 - c. It helps the alloy mix and combines with contaminants to “clean the alloy.
 - d. It coats the lead pot so it doesn’t rust.
207. What are some common fluxes?
- a. Wood, oil, wax, boracic acids (commercial flux)
 - b. Wool, cotton, leather (non-flammable)
 - c. Salt, sandstone, eggshell
 - d. Rubber, glass, sawblades
208. If bullets come out of the mold with wrinkles on the nose, a likely cause would be...
- a. The sprue plate is too tight.
 - b. The mold is too hot.
 - c. The mold is too cold.
 - d. The lead is too old.
209. “Frosty” bullets are caused by...
- a. Corn cob pipes and button noses
 - b. Lead that is too hot
 - c. Contaminants
 - d. Shaking the mold while the lead cools
210. We “ingotize” lead to...
- a. pre-clean our alloy and make the pieces convenient to handle.
 - b. positively charge the neutrons, allowing for greater accuracy.
 - c. add contaminants and make it easier to burn.
 - d. get all the water out.
211. As soon as bullets come out of the mold, they are still too hot to touch.
- a. True
 - b. False
212. Why do multi-cavity (those with more than two cavities) molds generally take more time to heat up?
- a. Because they are made of steel
 - b. Because the handles are longer
 - c. Because they usually have a different sprue plate
 - d. Because there is more mass to heat up
213. What relationship will help you cast bullets faster and with less trial and error?
- a. The relationship between the density of your alloy and your flux.
 - b. The relationship with your mother
 - c. The temperature relationship between alloy and mold
 - d. The distance between the lead pot and drop area
214. Why would you quench bullets?
- a. Because the sound reminds you of bacon
 - b. To make the lead softer
 - c. To make the lead shine better
 - d. To make the lead harder
215. Why does hardness matter?

- a. Soft bullets will deform in storage
 - b. Bullets that are too hard are lighter than the load data suggests
 - c. Bullets need to be hard enough that the base does not deform at the pressure you load at
 - d. Shooting hard bullets at slow velocities causes the secondary explosion effect
216. If you lube bullets they will not leave lead in the barrel.
- a. True
 - b. False
217. You have to buy bullet lube online.
- a. True
 - b. False
218. Bullet lube should be selected according to the velocity you plan to shoot.
- a. True
 - b. False
219. Bullet sizing dies are usually selected to be...
- a. 0.01" under bore diameter
 - b. Equal groove diameter
 - c. 0.001" over bore diameter
 - d. 0.001" over groove diameter
220. When buying lubing and sizing dies for a bullet you cast, you need a...
- a. caliber specific top punch and nose specific die body
 - b. new handle for your press to match your new dies
 - c. caliber specific die body and a nose specific top punch
 - d. the top punch and die body labeled the same as your mold
221. Harder lubes are generally harder to press through a Lubri-sizer and may require heating.
- a. True
 - b. False
222. Casting bullets is a great way to save money, gain a greater level of control in your handloading, challenge yourself, and it is great fun.
- a. True
 - b. False
223. When dropping bullet from the mold always:
- a. Have a dry cloth on the table to catch them
 - b. Drop the sprue back into the melting pot
 - c. Strike the mold with a hammer
 - d. Strike the hinge point of the handles with a mallet to release bullets never the mold
224. Bullets normally come out of the mold:
- a. Oversized
 - b. Undersized
 - c. Heavy
 - d. Light