Rifle Shooting Merit Badge

Requirements:
Updated Requirements as of January 1, 2002
1. Do the following:
   a. Explain why BB and pellet air guns must always be treated with the same respect as firearms.
   b. Describe how you would react if a friend visiting your home asked to see your or your family’s firearm(s).
   c. Explain the need for, and use and types of, eye and hearing protection.
   d. Give the main points of the laws for owning and using guns in your community and state.
   e. Explain how hunting is related to the wise use of renewable wildlife resources.
   f. Obtain a copy of the hunting laws for your state. Explain the main points of hunting laws in your state and give any special laws on the use of guns or ammunition.
   g. Identify and explain how you can join or be a part of shooting sports activities.
   h. Explain to your counselor the proper hygienic guidelines used in shooting.
   i. Give to your counselor a list of sources that you could contact for information on firearms and their use.
2. Do ONE of the following options:
   OPTION A – Rifle Shooting (Modern Cartridge Type)
   a. Identify the three main parts of a rifle, and tell how they function.
   b. Identify and demonstrate the three fundamental rules for safe gun handling.
   c. Identify the two types of cartridges, their parts, and how they function.
   d. Explain to your counselor what a misfire, hang fire, and squib fire are, and explain the procedures to follow in response to each.
   e. Identify and demonstrate the five fundamentals of shooting a rifle safely
   f. Identify and explain each rule for safe shooting.
   g. Demonstrate the knowledge, skills, and attitude necessary to safely shoot a rifle from the bench rest position or supported prone position while using the five fundamentals of rifle shooting.
   h. Identify the basic safety rules for cleaning a rifle, and identify the materials needed
   i. Demonstrate how to clean a rifle properly and safely
   j. Discuss what points you would consider in selecting a rifle
   k. Using a .22 caliber rim fire rifle and shooting from a bench rest or supported prone position at 50 feet, fire five groups (three shots per group) that can be covered by a quarter. Using these targets, explain how to adjust sights to zero.
   l. Adjust sights to center the group of the target and fire five groups (five shots per group). According to the target used, each shot in the group must meet the following minimum score:
      1. A-32 targets – 9
      2. A-17 or TQ – 1 targets – 7
      3. A – 36 targets – 5
Syllabus: Prepared by Kevin Konicek

Monday – Safety and Basic Range Operation
REQ#1a: (Instruction) Explain BB and pellet air guns, and why they must be used safely.
REQ#1b: (Instruction) Explain the basic of home gun safety, and how to react to their use
REQ#1c: (Instruction) Explain the need for eye and ear protection, and different types.
REQ#1h: (Instruction) Explain the proper hygienic guidelines used in shooting.
REQ#2b: (Instruction) Explain the three fundamental rules for safe gun handling.
REQ#2e: (Instruction) Explain the five fundamentals of shooting a rifle safely.
REQ#2f: (Instruction) Explain each rule for safe shooting.

*Shoot for REQ#2k, 2l if time allows

Tuesday – Gun Use, and Hunting
(Evaluation) Review from Monday THOUGHORLY
REQ#1d: (Instruction) Explain the laws for owning and using a gun for your state.
REQ#1e: (Instruction) Explain how hunting is good for wildlife resources
REQ#1f: (Instruction) Explain the hunting laws for the state
REQ#1g: (Instruction) Explain how to join in shooting sports activities
REQ#1i: (Instruction) Explain the list of sources to contact for gun information
REQ#2a: (Instruction) Explain the three main parts of a rifle, and tell how they function.
REQ#2c: (Instruction) Explain the types of ammo, their parts, and how they function
REQ#2d: (Instruction) Explain what a misfire, hang fire, and squib fire are, and what to do if they occur.

*Shoot for REQ#2k, 2l if time allows

Wednesday- Review of all Instruction – Shooting Requirements
Ask about OA eligibility – Take note of who might be gone.
(Evaluation) – Make sure EACH scout is comfortable, and knowledgeable on all requirements.
This should take the first half of class.

*Shoot for REQ#2k, 2l

Thursday – Let them shoot
REQ#2g: (Instruction/Evaluation) – Make sure each scout demonstrates the knowledge, skills,
and attitude necessary to safely shoot a rifle from the bench rest position.

*Shoot for REQ#2k, 2l

Friday – Cleaning Day
REQ#2h: (Instruction) Identify the basic safety rules for cleaning a rifle, and identify the materials needed
REQ#2i: (Evaluation) Have scouts demonstrate how to clean a rifle safely
Breakdown of the Requirements (Order of Days Taught)

1a Explain why BB guns and pellet guns must always be treated with the same respect as as firearms.

A common answer given to this question is that they can still hurt you. True as this is, the main reason BB guns and pellet guns must be treated with the same respect as shotguns and rifles of the habits that are developed while using them. In other words if they don't treat a BB gun or pellet gun with respect they will carry over bad habits and not treat a rifle or shotgun with respect.

1b Describe how you would react if a friend visiting your home asked to see your family's firearm(s)

There are multiple answers to this question. The first and easiest answer is to just say no. The second is to get parent permission and have the parent present when showing guns. This way it ensures that there will not be a situation with peer pressure or unsafe handling.

1c Explain the need for, use and types of eye and ear protection.

Eye and ear protection is pretty much self explanatory, to protect your eyes and ears. Your ears need to be protected from repetitive loud noises cause by firing a firearm. During hunting it is best not to wear ear protection so that you are aware of noises around you such as other hunters or animals. Eye protection however should be worn whenever firing a firearm. Safety glasses will help to protect from ricochets of ammo and also firearm malfunctions such as a backfire. During hunting, especially in a hunting party, safety glasses should be worn in case of an accident.

Safety glasses or shooting glasses are the only eye protection besides large corrective lens glasses. Sun glasses do not count.

Ear protection consists of muff style protection (which we have at the range) and foam ear plugs.

Remember you only get on pair of eyes and one pair of eyes, take care of them!

1h Explain to your counselor the proper hygienic guidelines used in shooting

Whenever shooting or handling guns, you will come into contact with a number of objects that are not good for your health such as lead, powder or powder residue, cleaning chemicals, etc...

For this reason it is recommended that you wash your hands and any other area of your body that may have had contact with these items thoroughly with soap and water.
2b Identify and demonstrate the three fundamentals rules for safe gun handling.

- Keep the gun pointed in a safe direction.

This means to keep the muzzle of the rifle pointed in a safe direction. A safe direction is anywhere that should your gun goes off, and then it will do the least amount of damage. Unsafe directions include towards buildings or shelters, people, concrete, etc...

- Keep your finger off the trigger until ready to shoot

Keep your finger outside the trigger guard until absolutely ready to shoot. The best place is to run your finger along the stock or receiver housing. It takes a fraction of a second to drop the finger down into the trigger guard.

- Keep the gun unloaded and action open until ready to shoot.

If the action is open, the gun cannot shoot. If the gun is unloaded the gun cannot shoot. Every time you are handed a gun you should check if it is loaded. Never trust anyone who gives you a gun and says it’s unloaded. ALWAYS CHECK IT YOURSELF. Many people have died because they thought it was unloaded. When storing guns, they should always be unloaded.

Use all these safety rules together and you will be safe. Make sure you always do all three because one can change very quickly. Someone may walk into an area that was thought to be safe. A stick may catch the trigger or a finger may slip. The gun may be loaded even if you think it’s not. Use all three rules and no one will get hurt.

2e Identify and demonstrate the five fundamentals of shooting a rifle safely.

The five fundamentals of shooting a rifle safely are: aim, breath control, hold control, trigger control, and follow through.

- Aim- properly using sights of a gun such as open sights or optical sights (scopes). Scopes are pretty simple, put the cross hairs on the target. Open sights are more difficult because the front and rear sight must be aligned and then positioned on the target.

- Breath control- when aiming you want to be able to be as steady as possible. When you breathe, your body moves ever so slightly. When you exercise breath control, you aim, then when you are ready to shoot you exhale then hold your breathe half way for about 5-10 seconds.

  This will allow your body to hold as still as possible. If you do not shoot in that 5-10 seconds, the continue your breathing and try again.

- Hold control- the ability to hold a gun steady while aiming. The steadiest positions are bench rest and prone. However since we only shoot the bench rest position, you will not really have to worry about too much hold control.
• Trigger control- when firing a rifle, you want to squeeze the trigger slowly. By doing this you reduce your risk jerking the rifle.
• Follow through- after you fire the rifle, keeping aiming at it so that you can see where you hit and where you were aiming. Also this allows you to keep your cheek on the stock until after you shoot which ensures you continue aiming.

2f Identify and explain each rule for safe shooting.

• Know your target and what’s beyond
• Know how to use your gun safely
• Be sure the gun is safe to operate
• Use only the correct ammunition for the gun
• Wear ear and eye protection
• Never use drugs or alcohol before or when shooting
• Store guns so they are inaccessible to unauthorized persons

1d. Give the main points of the laws for owning and using guns in your state and community.

• Whenever transporting a firearm in a motor vehicle, it must be cased in a proper case and unloaded.
• You cannot fire a firearm from a vehicle even if it is not moving with the engine off unless you are handicapped and have a permit. A motor vehicle is anything that is motor driven- Car, truck, four wheeler, boat, etc...
• No shooting within city limits.
• Convicted felons may not own, fire, or be on the same property where firearms are stored or shot.
• Do not shoot firearms under the influence of drugs or alcohol.
• No concealed weapons without a concealed weapons permit. Wisconsin does not have CW permits.
• You must be 18 to own and buy shotguns and rifles

1e Explain how hunting is related to the wise use of renewable wildlife resources.

This question is posing the question of why do we need to hunt and why is it good. First of all we need to hunt because in many cases of overpopulation. In Wisconsin this applies more to whitetail deer other than other animal. Years ago we removed most of the whitetails natural predators such as wolfs and big cats. Unchecked deer will populate an area to capacity. When an area can no longer sustain the population they will go search for space and food. As they spread they cross roads more leading to higher accident rates. Also they move into areas where they are unwanted such as farmland and towns. They cause crop damage and personal damage to gardens and flower beds.
Along with starvation comes disease. A large group of weak deer is a prime spot for a disease. In summation, we hunt to control population. The benefits are that we get food, the animal population is controlled, and local and state governments get funding.

1f. Obtain a copy of the hunting laws for your state. Explain the main points of hunting laws in your state and give any special laws on the use of guns and ammunition.

- Hunting is only allowed during the designated season.
- There is a bag limit for hunting (number of animals you can shoot in one day) Farmers who have special nuisance permits usually have a much higher bag limit if any bag limit. The nuisance permit allows farmers to shoot animals that may be destroying crops or killing animals. Animals that can be shot are deer, raccoons, coyotes, rabbits, black birds or crows, etc..
- You must have a hunting license for the animal you are hunting.
- No hunting on private property without permission
- When hunting, you must wear proper clothing such as blaze orange on at least 50% of your body when hunting deer during gun season.
- No poaching or shooting endangered species.
- Hunt only with the correct gun (don't hunt a deer with a .22 cal rifle, don't shoot a rabbit with a 10 gauge shotgun.)

1g Identify or explain how you can join or be part of shooting sports activities.

There are many activities that involve shooting such as

- Hunting
- Trap or skeet shooting with shotguns
- Target shooting
- Shooting competitions
- Join a gun or hunting club (whitetails unlimited, NRA, ducks unlimited, local hunting clubs)
- Paintball and other shooting activities that involve shooting at humans or human targets are not BSA approved activities and are usually not approved by professional shooting organizations

1i Give your counselor a list of sources that you could contact for information on firearms and their uses.

- Gun shops
- Police
- gun smith
- DNR
- Library
- Gun club
• Internet- (Beware of information you get on the Internet. Not all info found there is true. Stick to gun club web sites such as whitetails unlimited or NRA or any website that ends in .org or .gov
• Knowledgeable adult- not every adult knows what they are talking about.
• A hunter safety instructor

2a Identify the three main parts of a rifle, and tell how they function.

• Stock- Gives you something to hold on to when shooting
• Barrel- directs shot in direction
• Action - Fires, stores and reloads. It’s what makes the gun work.
• The other parts of a rifle are listed here. The scouts are not required to know all of these parts however when you clean the rifles for requirement, that gives you a great opportunity to show them the parts as you take it apart. Remember the quality of instruction is not only knowing what you are required to know, but knowing that little extra.

2c Identify the two types of cartridges, their parts and how they function.

The two types of cartridges are called center fire and rim fire

• Rim fire- the primer is around the rim of the cartridge and is not re loadable.
• Center fire- the primer is in the center of the cartridge and can be reloaded.

Center fire usually tend to cost more because they require more manufacturing and can be reloaded. A center fire cartridge cannot be fire in a rim fire rifle and a rim fire cartridge cannot be fired in a center fire rifle.

The parts of these cartridges are the bullet, powder, casing, and primer.

• The casing holds everything together and is ejected out of the gun after being fired
• The primer is a plastic explosive in the rear of the casing that explodes when struck
• The powder burns when lit and expands pushing the bullet out of the barrel
• The bullet fires out of the barrel and strikes target.

2d Explain to your counselor what a misfire, hangfire and squib fire are, and explain the procedures in response to each.

These are all abnormal firings. All of these examples are dangerous so proceed with caution.

• Misfire- The misfire occurs when a round is loaded in the chamber and the chamber is closed, the trigger is pulled and for some reason the gun does not fire. There are several reasons for a misfire. The most common reason is a defect in the round such as the primer not fully laid in the rim of the round, especially cheap rimfire rounds. This will be a common occurrence usually having 10-20 misfires a day. Another less common reason is a defective rifle.
Procedure for misfire.

At any time a scout should have a problem, have them raise their hand until you can get there. By having them raise their hand, you reduce the risk of injury should they attempt to fix the problem themselves. When you reach the scout with the misfire, wait 5 seconds to open bolt in case of a hangfire. Eject the round. Usually by spinning the round in the chamber so that the firing pin strikes a different area on the rim, the round will fire. If however the round does not fire after 2 strikes, remove round and disarm it. If one rifle misfires constantly, then pull it off the shooting line and mark it with orange tape. Be sure to label the reason it was taken off the line.

- Hangfire- A hangfire occurs when the trigger is pulled and the round delays in firing anywhere from 1 to 10 seconds. This can be caused by a defect in the round such as wet or damp powder or more commonly a delay in the trigger mechanism of the rifle.

Procedure for hangfire.

Should a hangfire occur, make sure the scout reports it to you. Make a log of all hangfires and keep an eye open for a rifle with multiple hang fires. Multiple hangfires mean that the rifle needs maintainable and should be pulled from the line, marked with orange tape, and labeled why it was pulled.

- Squib fire- A squib fire occurs when the round is underpowered. It is a problem with the round and has nothing to do with the gun other than the gun barrel possibly being partially blocked. The signs of a squib fire is a low kickback and most notable a odd sound when firing. It makes the sound of a puff of air with a slight whistle. Unless you have seen one before its almost impossible to describe it. However you will notice that something was not right about that shot.

Procedure for squib fire

Cease fire immediately and check to make sure barrel is clear of obstructions. If you cannot see through the barrel, run a work rod down through. Again as long as the barrel is clear, shooting can resume.

2k Using a .22 cal rimfire rifle and shooting from a bench rest position at 50 feet, fire five groups (three shots per group)that can be covered by a quarter. Using these targets, explain how to adjust sights to zero a rifle.

This is pretty self explanatory; they must shoot three shots in the diameter of a quarter and do that 5 times. 3 shots only, no more per group no less. I find it’s easiest to give them 15 rounds and let them try to get the requirement of the 5 target sheets. (3 rounds per target)

2l Adjust the sights to center a group on the target* and fire five groups (five shots per group). According to the target used, each shot in the group must meet
the following minimum score (1) A-32 targets-9 ; (2) A 17 or TQ-1 targets – 7; (3) A-36 targets - 5

This requirement will be easiest done if they shoot the five shots per group and shoot 5 groups. Explain to them how to sight in a scope but don't let them try to sight them.

2g Demonstrate the knowledge skills and attitude necessary to safely shoot a rifle from the bench rest position or supported prone position while using the five fundamentals of rifle shooting.

This requirement is based solely on the judgment of the counselor whether or not the scout is mature and safe enough to use a gun by themselves. If you cannot turn your back and walk away from the scout holding a loaded gun, then you do not have to pass them. This requirement is the hardest requirement to make up. IT CAN NOT BE MADE UP IN AN HOUR. If the scout fails this requirement they must sit through another entire week of class so that the instructor can observe their behavior.

Friday - Cleaning day

2h Identify the basic safety rules for cleaning a rifle, and identify the materials needed.

The three main rules still apply. Safe direction, unloaded and action open, and finger off the trigger. However new rules apply with the cleaning chemicals. The powder solvent (hoppes) can cause brain damage either by inhaling it or letting it soak into your skin. To reduce the risk of ether of these problems make sure that guns are cleaned in a well ventilated area and that hands and any other area that came in contact with hoppes is washed thoroughly.

Materials needed are a cleaning brush (toothbrush works well), clean rags, a work rod with wire brush and patch jigs, patches, bore snake, rem oil or other protective oil, hoppes powder solvent, dental pick.

2i Demonstrate how to clean a rifle properly and safely.

This is a requirement that you will be trained on by the SS director. It is bad judgment to take apart something you don't know how to put back together much less use dangerous chemicals without knowing how to handle them.

2j Discuss what points you would consider in selecting a rifle.

- purpose- What are you going to do with it, hunt, target shoot, etc...
- action- what type
- weight- you don't want something to heavy that will tire your arms. However the heavier the gun the more kick absorbed by the rifle
length- Length of a gun also increases or decreases weight. Also a longer barrel will give you a steady swing but is not recommended for hunting in think brush or woods.

- Brand- You want a brand you can trust.
- Quality- A quality gun will last you forever if it is properly taken care of. Also it will be more dependable.
- Cost- You get what you pay for
- Where you buy it- The best place to buy a gun is an actual gun store. Wal-Mart sells them however they probably have no guarantees on their gun and the moment you leave its your problem. Also the sales associate may not know anything about guns. Also it is legal to buy guns from an individual without any license or background check. Beware of this; be sure you can shoot the gun before you buy it. The best idea is to buy a gun from a reputable dealer that will also be able to service it.
- Color- Guns can be traditional black barrel with wood stock or they can have a nickel plated barrel to make them look chrome. Synthetic stocks are also available in different colors. The entire gun can be camouflaged for duck or turkey hunting.

**Tips and Tricks:**
- SAFTEY! SAFTEY! SAFTEY! – I cannot express enough how important this is. Make sure you impress on these kids the importance of a safe range on day 1. Never let them forget, and you will have an incident free summer.
- For REQ2b: (Identify and demonstrate the three fundamental rules for safe gun handling) I find it effective to make the memorization of these three rules the only way to be let onto the range for Tuesday classes. It makes them think, and reminds them of the importance of safety, even after the talks are over on Monday.
- Cleaning guns: Depending on the number of kids in your class, you might have to double up the scouts on guns. No more than 3 scouts on a gun, and make sure all are participating in the cleaning process, and giving you feedback, and answering your questions.
- LET THEM SHOOT! Don’t just lecture to them for three days straight, and then let them shoot on a Wednesday or Thursday. They will get bored. Trust me. Make it entertaining, and fun. And let them shoot every day if at all possible.
- Don’t be a hypocrite. Apply all your range rules to all of your scouts, adults, and your staff.