

# 2010

## RIFLE SHOOTING PROGRAM OVERVIEW & WORKBOOK



HEARTLAND PUBLIC SHOOTING PARK

MERIT BADGE UNIVERSITY

OVERLAND TRAILS COUNCIL

7/31/2010

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FEBRUARY 2010

Information in this booklet was accurate at the time of publishing.  
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Program Overview & Workbook was reviewed by  
MBU Staff/Committee.

## RIFLE SHOOTING PROGRAM OVERVIEW

**COUNSELOR:** tba

C/O: Overland Trails Council  
PO Box 1361  
Grand Island, NE 68802-1361

**LOCATION:** Heartland Public Shooting Park  
6788 West Husker Hwy  
Alda, NE 68810

**TRANSPORTATION:** Transportation is provided

**ADDITIONAL COSTS:** \$12.00

**CLASS SIZE:** 20

**BRING TO CLASS:** Rifle Shooting merit badge pamphlet.  
Rifle Shooting merit badge workbook, part one & part two.  
Signed "Application for Merit Badge", found at the end of the merit badge workbook. (This will be your only record of work completed on this merit badge.) If your Council requires the official "blue card", you must bring one with you to class.

**PRE-REQUISITES:** Complete Part One of the workbook before class (requirement 1).  
Complete information on the "Application for Merit Badge" including Scoutmasters signature.

**CURRICULUM:** Requirements 2-Rifle Shooting Option, will be completed during class (part two of the workbook). Pre-requisites will also be reviewed during class.



**RIFLE SHOOTING**  
Boy Scouts Requirements 2010

PRE-REQUISITE REQUIREMENTS ARE PRINTED IN **ITALICS &**  
MUST BE COMPLETED BEFORE CLASS.

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

2. Do ONE of the following options:

**Rifle shooting (Modern Cartridge Type) Option**

- 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, hangfire, 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 benchrest 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 rimfire rifle and shooting from a benchrest 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 a rifle.
- l) Adjust sights to center the 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.

**Air Rifle Shooting (BB or Pellet) Option**

- a) Identify the three main parts of an air rifle, and tell how they function.
- b) Identify and demonstrate the three fundamental rules for safe gun handling.
- c) Identify the two most common types of air rifle ammunition.
- d) Identify and demonstrate the five fundamentals of shooting a rifle safely.
- e) Identify and explain each rule for shooting an air rifle safely.
- f) Demonstrate the knowledge, skills, and attitude necessary to safely shoot a target from the benchrest position or supported prone position while using the five fundamentals of rifle shooting.
- g) Identify the basic safety rules for cleaning an air rifle, and identify the materials needed.
- h) Demonstrate how to clean an air rifle safely.
- i) Discuss what points you would consider in selecting an air rifle.
- j) Using a BB gun or pellet air rifle and shooting from a benchrest or supported prone position at 15 feet for BB guns or 33 feet for air rifles, fire five groups (three shots per group) that can be covered by a quarter.
- k) Adjust sights to center the 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) BB rifle at 15 feet or 5 meters using TQ-5 targets—8; (2) pellet air rifle at 25 feet using TQ-5 targets—8, at 33 feet or 10 meters using AR-1 targets—6.

#### **Muzzleloading Rifle Shooting Option**

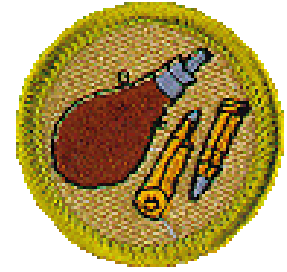
- a) Give a brief history of the development of muzzleloading rifles.
- b) Identify principal parts of percussion and flintlock rifles and discuss how they function.
- c) Demonstrate and discuss the safe handling of muzzleloading rifles.
- d) Identify the various grades of black powder and their proper use.
- e) Discuss proper safety procedures pertaining to black powder use and storage.
- f) Discuss proper components of a load.
- g) Identify proper procedures and accessories used for loading a muzzleloading rifle.
- h) Demonstrate the knowledge, skills and attitude necessary to safely shoot a muzzleloading rifle on a range, including range procedures.
- i) Shoot a target with a muzzleloading rifle using the five fundamentals of firing a shot.
- j) Identify the materials needed to clean a muzzleloading rifle safely. Using these materials, demonstrate how to clean a muzzleloading rifle safely.
- k) Identify the causes of a muzzleloading rifle's failure to fire and explain or demonstrate proper correction procedures.
- l) Discuss what points you would consider in selecting a muzzleloading rifle.
- m) Using a muzzleloading rifle of .45 or .50 caliber and shooting from a benchrest or supported prone position, fire three groups (three shots per group) at 50 feet that can be covered by the base of a standard-size soft drink can.
- n) Center the group on the target and fire three groups (five shots per group). According to the target used, each shot in the group must meet the following minimum score: (1) at 25 yards using NRA A-23 or NMLRA 50-yard targets—7; (2) at 50 yards using NRA A-25 or NMLRA 100-yard targets—7.

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\*NOTE: It is not always practical to adjust the sights (i.e., when using a borrowed fixed-sight rifle). For requirement 2(l), you may demonstrate your ability to use the shooting fundamentals by shooting five shot groups (five shots per group) in which all shots can be covered by or touch a quarter and then explain how to adjust the sights to zero the rifle used.

# RIFLE SHOOTING WORKBOOK

## PART ONE, PRE-REQUISITIES



Name \_\_\_\_\_  
Unit # \_\_\_\_\_ District \_\_\_\_\_  
Council \_\_\_\_\_

**Part One of the workbook must be completed before class.**

**Bring the entire workbook (part one and part two) with you to class.**

**Also bring the "Application for Merit Badge" signed by your scoutmaster (included at the end of the workbook).**

- 1. Do the following:
  - a) Explain why BB and pellet air guns must always be treated with the same respect as firearms.

*Explain why BB and pellet air guns must always be treated with the same respect:*

|  |
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|  |
|  |
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|  |

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

*Describe how you would react:*

|  |
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|  |
|  |
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|  |

- c) Explain the need for, and use and types of, eye and hearing protection.

*Explain the need for eye protection:*

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*Hearing protection:*

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**RIFLE SHOOTING WORKBOOK, PART ONE, p.2**

---

Name \_\_\_\_\_

1. continued

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

*Main points of the laws for owning and using guns:*

|  |
|--|
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|  |
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|  |

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

*How is hunting related to the wise use of renewable wildlife resources:*

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|--|
|  |
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- 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 and ammunition.

*Main points of the hunting laws in your state:*

|  |
|--|
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*Special laws on the use of guns and ammunition:*

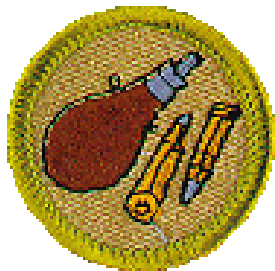
|  |
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- g) Identify and explain how you can join or be a part of shooting sports activities.

*Identify and explain how you can join or be a part of shooting sports activities:*

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## RIFLE SHOOTING WORKBOOK PART TWO, CLASS CURRICULUM

Name \_\_\_\_\_  
Unit # \_\_\_\_\_ District \_\_\_\_\_  
Council \_\_\_\_\_

**Part Two of the workbook will be completed during class.**

2. Do ONE of the following options:

### **RIFLE SHOOTING (Modern Cartridge Type) OPTION**

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



*How do the three main parts function:*

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|--|
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Name \_\_\_\_\_

Rifle Shooting Option, continued

- b) Identify and demonstrate the three fundamental rules for safe gun handling.

*Identify and demonstrate the three fundamental rules for safely handling a shotgun:*

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|--|
|  |
|  |
|  |
|  |

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



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

*Explain the following:*

|                   |  |
|-------------------|--|
| <i>Misfire</i>    |  |
| <i>Hangfire</i>   |  |
| <i>Squib fire</i> |  |

*Procedures to follow in response to each:*

|                   |  |
|-------------------|--|
| <i>Misfire</i>    |  |
| <i>Hangfire</i>   |  |
| <i>Squib fire</i> |  |





Name \_\_\_\_\_

Rifle Shooting Option, continued

- k) Using a .22 caliber rimfire rifle and shooting from a benchrest 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 a rifle.

*Explain how to adjust sights to zero a rifle:*

|  |
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|  |

- l) Adjust sights to center the 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.

*Fire five groups:*

|                                  |                 |              |
|----------------------------------|-----------------|--------------|
| <i>Group number one score:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number two score:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number three score:</i> | <i>initial:</i> | <i>date:</i> |
| <i>Group number four score:</i>  | <i>initial:</i> | <i>date:</i> |
| <i>Group number five score:</i>  | <i>initial:</i> | <i>date:</i> |

Name \_\_\_\_\_

**AIR RIFLE SHOOTING (BB or Pellet) OPTION**

- a) Identify the three main parts of an air rifle, and tell how they function.



*How do the three main parts function:*

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Name \_\_\_\_\_

Air Rifle Shooting Option, continued

- b) Identify and demonstrate the three fundamental rules for safe gun handling.

*Identify and demonstrate the three fundamental rules for safe gun handling:*

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- c) Identify the two most common types of air rifle ammunition.

*Identify the two most common types of ammunition:*

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|  |

- d) Identify and demonstrate the five fundamentals of shooting a rifle safely.

*Five fundamentals of safely shooting a rifle:*

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- e) Identify and explain each rule for shooting an air rifle safely.

*Identify and explain each rule for shooting an air rifle safely:*

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Name \_\_\_\_\_

Air Rifle Shooting Option, continued

- f) Demonstrate the knowledge, skills, and attitude necessary to safely shoot a target from the benchrest position or supported prone position while using the five fundamentals of rifle shooting.

*Demonstrate knowledge, skills, and attitude:*

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- g) Identify the basic safety rules for cleaning an air rifle, and identify the materials needed.

*Identify basic safety rules for cleaning an air rifle:*

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|  |

*Identify the materials needed:*

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- h) Demonstrate how to clean an air rifle safely.

*Demonstrate how to clean an air rifle safely:*

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Name \_\_\_\_\_

Air Rifle Shooting Option, continued

- i) Discuss what points you would consider in selecting an air rifle.

*Discuss what points you would consider:*

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|  |

- j) Using a BB gun or pellet air rifle and shooting from a benchrest or supported prone position at 15 feet for BB guns or 33 feet for air rifles, fire five groups (three shots per group) that can be covered by a quarter.

*Fire five groups:*

|   |                 |              |
|---|-----------------|--------------|
| <i>Group number one covered by a quarter:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number two covered by a quarter:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number three covered by a quarter:</i> | <i>initial:</i> | <i>date:</i> |
| <i>Group number four covered by a quarter:</i>  | <i>initial:</i> | <i>date:</i> |
| <i>Group number five covered by a quarter:</i>  | <i>initial:</i> | <i>date:</i> |

- k) Adjust sights to center the 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) BB rifle at 15 feet or 5 meters using TQ-5 targets—8; (2) pellet air rifle at 25 feet using TQ-5 targets—8, at 33 feet or 10 meters using AR-1 targets—6.

*Fire five groups:*

|                                  |                 |              |
|----------------------------------|-----------------|--------------|
| <i>Group number one score:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number two score:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number three score:</i> | <i>initial:</i> | <i>date:</i> |
| <i>Group number four score:</i>  | <i>initial:</i> | <i>date:</i> |
| <i>Group number five score:</i>  | <i>initial:</i> | <i>date:</i> |

Name \_\_\_\_\_

**Muzzleloading Rifle Shooting Option**

- a) Give a brief history of the development of muzzleloading rifles.

*Brief history:*

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- b) Identify principal parts of percussion and flintlock rifles and discuss how they function.



*How do the principal parts function:*

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Name \_\_\_\_\_

Muzzleloading Rifle Shooting Option, continued

- g) Identify proper procedures and accessories used for loading a muzzleloading rifle.

*Identify proper procedures and accessories:*

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|  |

- h) Demonstrate the knowledge, skills and attitude necessary to safely shoot a muzzleloading rifle on a range, including range procedures.

*Demonstrate knowledge, skill, and attitude:*

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- i) Shoot a target with a muzzleloading rifle using the five fundamentals of firing a shot.

*Shoot a target using the five fundamentals of firing the shot:*

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|  |

- j) Identify the materials needed to clean a muzzleloading rifle safely. Using these materials, demonstrate how to clean a muzzleloading rifle safely.

*Identify materials needed to clean:*

|  |
|--|
|  |
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|  |

*Demonstrate how to clean a muzzle-loading rifle safely:*

|  |
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|  |
|  |

Name \_\_\_\_\_

Muzzleloading Rifle Shooting Option, continued

- k) Identify the causes of a muzzleloading rifle's failure to fire and explain or demonstrate proper correction procedures.

*Identify causes of failing to fire:*

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*Explain or demonstrate proper correction procedures:*

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- l) Discuss what points you would consider in selecting a muzzleloading rifle.

*Discuss points you would consider if selecting a muzzle-loading rifle:*

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|  |

Name \_\_\_\_\_

Muzzleloading Rifle Shooting Option, continued

- m) Using a muzzleloading rifle of .45 or .50 caliber and shooting from a benchrest or supported prone position, fire three groups (three shots per group) at 50 feet that can be covered by the base of a standard-size soft drink can.

*Fire three groups:*

|  |                 |              |
|--|-----------------|--------------|
| <i>Group number one covered by a soft drink can:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number two covered by a soft drink can:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number three covered by a soft drink can:</i> | <i>initial:</i> | <i>date:</i> |

- n) Center the group on the target and fire three groups (five shots per group). According to the target used, each shot in the group must meet the following minimum score: (1) at 25 yards using NRA A-23 or NMLRA 50-yard targets—7; (2) at 50 yards using NRA A-25 or NMLRA 100-yard targets—7.

*Fire three groups:*

|                                  |                 |              |
|----------------------------------|-----------------|--------------|
| <i>Group number one score:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number two score:</i>   | <i>initial:</i> | <i>date:</i> |
| <i>Group number three score:</i> | <i>initial:</i> | <i>date:</i> |

## **ORGANIZATIONS and WEB SITES**

*(Whenever you go online, be sure you have your parent's permission first.)*

Alco Target Company

<http://www.alcotarget.com>

Michaels of Oregon

<http://www.michaelsforegon.com>

National Target Company

<http://www.nationaltarget.com>

U.S. Target Company

<http://www.ustargetonline.com>

# RIFLE SHOOTING WORKBOOK

Notes



**APPLICATION FOR MERIT BADGE**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Is a registered \_\_\_\_\_ Boy Scout,  
 \_\_\_\_\_ Varsity Scout,  
 \_\_\_\_\_ Venturer,

of \_\_\_\_\_ No. \_\_\_\_\_  
Troop, team, crew, ship

District: \_\_\_\_\_

Council: \_\_\_\_\_

**MERIT BADGE UNIVERISTY**

Merit Badge: **Rifle Shooting**

Counselor: \_\_\_\_\_

Address: Overland Trails Council

PO Box 1361

2808 O'Flannagan

Grand Island, NE 68802-1361

Phone: 308-382-3717

email: mbuotc@yahoo.com

***and is qualified to begin working for this merit badge and has completed the following pre-requisite requirements:***

**SECTION A PRE-REQUISITE REQUIREMENTS**

| Requirement No. and letter | Date of Approval | Counselor Initial | Requirement No. and letter | Date of Approval | Counselor Initial |
|----------------------------|------------------|-------------------|----------------------------|------------------|-------------------|
| 1                          |                  |                   |                            |                  |                   |
|                            |                  |                   |                            |                  |                   |
|                            |                  |                   |                            |                  |                   |

***The applicant has personally appeared before me and demonstrated to my satisfaction that he has met all pre-requisites requirements for the above stated merit badge and is ready to attend his assigned MBU class.***

Signature of Unit Leader \_\_\_\_\_ Date \_\_\_\_\_

**SECTION B APPLICANTS RECORD**

| Requirement No. and letter | Date of Approval | Counselor Initial | Requirement No. and letter | Date of Approval | Counselor Initial |
|----------------------------|------------------|-------------------|----------------------------|------------------|-------------------|
| Rifle a                    |                  |                   | Rifle j                    |                  |                   |
| Rifle b                    |                  |                   | Rifle k                    |                  |                   |
| Rifle c                    |                  |                   | Rifle l                    |                  |                   |
| Rifle d                    |                  |                   |                            |                  |                   |
| Rifle e                    |                  |                   |                            |                  |                   |
| Rifle f                    |                  |                   |                            |                  |                   |
| Rifle g                    |                  |                   |                            |                  |                   |
| Rifle h                    |                  |                   |                            |                  |                   |
| Rifle i                    |                  |                   |                            |                  |                   |

The applicant has personally appeared before me and demonstrated to my satisfaction that he has completed all requirements in **SECTION B** above for the

Merit Badge: **Rifle Shooting**

Name of Counselor: \_\_\_\_\_

Signature of Counselor \_\_\_\_\_ Date \_\_\_\_\_

### SCOUT INSTRUCTIONS

- Complete your name, address, city, unit type & number, district, & council on the Application for Merit Badge.
- Your unit leader must sign the Application for Merit Badge before attending class.
- All other information is already printed on the Application for Merit Badge; please make sure all information is correct.
- The merit badge counselor is registered & approved for this merit badge and is on the MBU Counselor's List.
- Read the merit badge pamphlet.
- Attend the merit badge class.
- Always meet with your counselor along with a buddy (a Scout, friend, or parent)
- Have your merit badge worksheet with you when you attend class.
- **If the merit badge pre-requisites are not completed before class, you will not be able to complete the merit badge during this weekend event, you will have to follow up with your Unit's Advancement Chair when you return home**
- **PLEASE BE AWARE THAT SOME COUNSELORS WILL NOT ALLOW YOU TO ATTEND THEIR CLASS WITHOUT PRE-REQUISITES COMPLETED—CLASS CURRICULUM IS DEPENDENT ON PRE-REQUISITE WORK BEING COMPLETED!**

### COUNSELOR INSTRUCTIONS

- Never meet alone with a Scout.
- Verify all information & merit badge name on Application for Merit Badge is correct.
- Sign your name on the line at the bottom of **"SECTION B APPLICANTS RECORD"**.