



Canoeing

Merit Badge Workbook

This workbook can help you but you still need to read the merit badge pamphlet (book). No one can add or subtract from the Boy Scout Requirements #33216. Merit Badge Workbooks and much more are below: [Online Resources](#). Send comments to the workbook developer: craig@craiglincoln.com. Requirements revised: 2005, Workbook updated: May 2008.

Scout's Name: _____ Unit: _____

Counselor's Name: _____ Counselor's Ph #: _____

1. Show that you know first aid for injuries or illnesses that could occur while canoeing, including

hypothermia, _____

heat reactions, _____

dehydration, _____

insect stings, _____

tick bites, _____

and blisters _____

2. Do the following:

(a) Identify the conditions that must exist before performing CPR on a person. _____

Explain how such conditions are recognized. _____

(b) Demonstrate the proper technique for performing CPR using a training device approved by your counselor. _____

3. Before doing the following requirements, successfully complete the BSA swimmer test: Jump feetfirst into water over the head in depth. Level off and swim 75 yards in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy, resting backstroke. The 100 yards must be completed in one swim without stops and must include at least one sharp turn. After completing the swim, rest by floating. _____

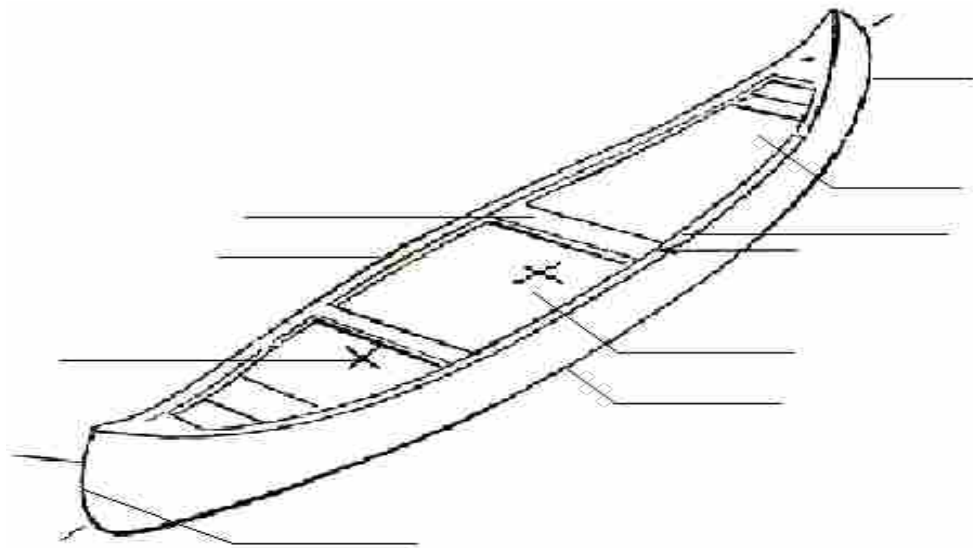
4. Discuss the following

(a) The BSA Safety Afloat policy Tell how it applies to canoeing activities. _____

(b) The most common weather and water-related hazards encountered while canoeing and how to deal safely with each one. _____

5. Do the following:

(a) Name and point out the major parts of a canoe.



(b) Describe how the length and shape of a canoe affect its performance. _____

(c) Discuss the advantages and disadvantages of the different materials used to make canoes.

Material

Advantages

Disadvantages

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(d) Name and point out the parts of a paddle.



Explain the difference between a straight and bent-shaft paddle _____

and when each is best used. _____

(e) Demonstrate how to correctly size a paddle for a paddler in a sitting position and a kneeling position. _____

(f) Name the different types of personal flotation devices (PFDs), and explain when each type should be used. _____

(g) Show how to properly fit and test a PFD of correct size. _____

(h) Discuss the general care and maintenance of canoeing equipment. _____

(i) Discuss what personal and _____

group equipment would be appropriate for a canoe camping trip. _____

Describe how personal and group equipment can be packed and protected from water. _____

- (j) Demonstrate how to load and secure equipment in a canoe. _____
- (k) Using appropriate knots, demonstrate how to secure a canoe to a rack on land, a vehicle, or a canoe trailer. _____

6. With a companion, wearing the proper PFD and appropriately dressed for the weather and water conditions, use a properly equipped canoe to demonstrate the following:

- (a) Safely carry and launch the canoe from a dock or shore (both, if possible). _____
- (b) Safely land the canoe on a dock or shore (both, if possible) and return it to its proper storage location. _____
- (c) Demonstrate kneeling and sitting positions in a canoe and explain the proper use for each position. _____
- (d) Change places while afloat in the canoe. _____
- (e) In deep water, exit the canoe and get back in without capsizing. _____
- (f) Capsize the canoe and demonstrate how staying with a capsized canoe will support both paddlers. _____
- (g) Swim, tow, or push a swamped canoe 50 feet to shallow water. In the shallow water, empty the swamped canoe and reenter it.
- (h) In deep water, rescue a swamped canoe and its paddlers by emptying the swamped canoe and helping the paddlers safely reenter their boat without capsizing.

7. With a companion, wearing the proper PFD and appropriately dressed for the weather and water conditions, demonstrate the following paddling strokes as both a bow and stern paddler:

- (a) Forward stroke _____
- (b) Backstroke _____
- (c) Draw _____
- (d) Pushaway _____
- (e) Forward sweep _____
- (f) Reverse or back sweep _____

For stern paddling only:

- (g) J-stroke _____

8. Using the strokes in requirement 7, demonstrate the following tandem maneuvers while paddling on opposite sides and without changing sides. Repeat after switching positions and paddling sides:

- (a) Pivot or spin the canoe in either direction. _____
- (b) Move the canoe sideways or abeam in either direction. _____
- (c) Stop the canoe. _____
- (d) Move the canoe in a straight line for 50 yards. _____

9. Wearing the proper PFD and appropriately dressed for the weather and water conditions, demonstrate solo canoe handling:

- (a) Launch from shore or a pier (both, if possible). _____

(b) Using a single-blade paddle and paddling only on one side, demonstrate proper form and use of the forward stroke, backstroke, draw stroke, pushaway stroke, forward sweep, reverse or back sweep, and J-stroke. Repeat while paddling on the other side. _____

(c) While paddling on one side only, paddle a 50-yard course making at least one turn underway and one reverse of direction. Repeat while paddling on the other side. _____

(d) Make a proper landing at a dock or shore (both, if possible). Store canoe properly (with assistance, if needed). _____

(e) In deep water, exit the canoe and then get back in without capsizing. _____

10. Discuss the following types of canoeing:

(a) Olympic flatwater _____

(b) Outrigger _____

(c) Marathon _____

(d) Freestyle _____

(e) Whitewater _____

(f) Canoe poling _____

Online Resources: *(Use any Internet resource with caution and only with your parent's or guardian's permission.)*

Boy Scouts of America: ► scouting.org ► [Guide to Safe Scouting](#) ► [Age-Appropriate Guidelines](#) ► [Safe Swim Defense](#)
 ► [Scout](#) ► [Tenderfoot](#) ► [Second Class](#) ► [First Class](#) ► [Rank Videos](#) ► [Safety Afloat](#)

Boy Scout Merit Badge Workbooks: usscouts.org -or- meritbadge.org Merit Badge Books: www.scoutstuff.org

Requirement Resources

1. First Aid: [Hypothermia](#) - [Heat Reactions](#) - [Dehydration](#) - [Insect Stings](#) - [Tick Bites](#) - [Blisters](#)

2. [CPR](#)

3. Swimming: [BSA Swim Test](#): [Diving](#) also has the feetfirst jump in - [Sidestroke](#) - [Breaststroke](#) - [Trudgen Crawl](#) - [Backstroke](#) - [Swimming Turns](#) - [Floating](#)

4. The BSA Safety Afloat policy you need is below

5. See the blank canoe and paddle diagrams is above.

5a-c. Major parts of a canoe diagram is in the [Aquatics Troop Program Feature](#). The blank canoe diagram is above.

5d/e. The parts of a paddle diagram is in the [Boating-Canoeing Troop Program Feature](#). The blank paddle diagram is above

5f/g. [PFD](#)

7. Canoe stroke diagrams are in the [Boating-Canoeing Troop Program Feature](#).

6-10. [ExpertVillage.com Lesson Videos](#): [Canoeing Safety](#) - [PDFs](#) - [Paddles](#) - [Getting In/Out](#) - [Paddling](#) - [On The Water](#)

5-10: [ExpertVillage.com Lesson Videos](#):

 [Canoeing Safety](#)

 [PDFs](#)

 [Paddles](#)

 [Getting In/Out](#)

 [Paddling](#)

 [On The Water](#)

General Resources

American Canoe Association: <http://www.acanet.org>

American Whitewater: <http://www.americanwhitewater.org>

USA Canoe/Kayak: <http://www.usack.org>

United States Canoe Association: <http://www.uscanoe.com>

SAFETY AFLOAT

Safety Afloat has been developed to promote boating and boating safety and to set standards for safe unit activity afloat. Before a BSA group may engage in an excursion, expedition, or trip on the water (canoe, raft, sailboat, motorboat, rowboat, floating in an inner tube, or other craft), adult leaders for such activity must complete Safety Afloat Training, No. 34159, have a commitment card, No. 34242, with them, and be dedicated to full compliance with all nine points of Safety Afloat.

1. Qualified Supervision

All activity afloat must be supervised by a mature and conscientious adult age 21 or older who understands and knowingly accepts responsibility for the well-being and safety of the children in his or her care, who is experienced and qualified in the particular watercraft skills and equipment involved in the activity, and who is committed to compliance with the nine points of BSA Safety Afloat. One such supervisor is required for each 10 people, with a minimum of two adults for any one group. At least one supervisor must be age 21 or older, and the remaining supervisors must be age 18 or older. All supervisors must complete BSA Safety Afloat and Safe Swim Defense training and rescue training for the type of watercraft to be used in the activity, and at least one must be trained in CPR. It is strongly recommended that all units have at least one adult or older youth member currently trained as a BSA Lifeguard to assist in the planning and conducting of all activity afloat. For Cub Scouts: The ratio of adult supervisors to participants is one to five.

2. Physical Fitness

All persons must present evidence of fitness by a complete health history from a physician, parent, or legal guardian. Adjust all supervision, discipline, and protection to anticipate any risks associated with individual health conditions. In the event of any significant health conditions, a medical evaluation by a physician should be required by the adult leader.

3. Swimming Ability

A person who has not been classified as a "swimmer" may ride as a passenger in a rowboat or motorboat with an adult swimmer, or in a canoe, raft, or sailboat with an adult who is trained as a lifeguard or a lifesaver by a recognized agency. In all other circumstances, the person must be a swimmer to participate in an activity afloat. Swimmers must pass this test:

Jump feetfirst into water over your head. Swim 75 yards in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy resting backstroke. The 100 yards must be swum continuously and include at least one sharp turn. After completing the swim, rest by floating. This qualification test should be renewed annually.

4. Personal Flotation Equipment

Properly fitted U.S. Coast Guard-approved personal flotation devices (PFDs) must be worn by all persons engaged in activity on the open water (rowing, canoeing, sailing, boardsailing, motorboating, waterskiing, rafting, tubing, kayaking, and surfboarding). Type II and III PFDs are recommended.

5. Buddy System

All activity afloat necessitates using the buddy system. Not only must every individual have a buddy, but every craft should have a "buddy boat" when on the water.

6. Skill Proficiency

All participants in activity afloat must be trained and experienced in watercraft handling skills, safety, and emergency procedures. (a) For unit activity on white water, all participants must complete special training by a BSA Aquatics Instructor or qualified whitewater specialist. (b) Powerboat operators must be able to meet requirements for the Motorboating merit badge or equivalent. (c) Except for whitewater and powerboat operation as noted above, either a

minimum of three hours' training and supervised practice or meeting requirements for "basic handling tests" is required for all float trips or open-water excursions using unpowered craft. (d) Motorized personal watercraft, such as the Jet Ski? and SeaDoo?, are not authorized for use in Scouting aquatics, and their use should not be permitted in or near BSA program areas.

For Cub Scouts: Canoeing, kayaking, rowing, and rafting for Cub Scouts (including Webelos Scouts) are to be limited to council/district events on flat water ponds or controlled lake areas free of powerboats and sailboats. Prior to recreational canoeing and kayaking, Cub Scouts are to be instructed in basic handling skills and safety practices.

7. Planning

Float Plan — Obtain current maps and information about the waterway to be traveled. Know exactly where the unit will "put in" and "pull out" and what course will be followed. Travel time should be estimated generously. Review the plan with others who have traveled the course recently.

Local Rules — Determine which state and local regulations are applicable, and follow them. Get written permission to use or cross private property.

Notification — File the float plan with parents or participants and a member of the unit committee. File the float plan with the local council office when traveling on running water. Check in with all those who should be notified when returning.

Weather — Check the weather forecast just before setting out, and keep an alert weather eye. Bring all craft ashore when rough weather threatens.

Contingencies — Planning must identify possible emergencies and other circumstances that could force a change of plans. Appropriate alternative plans must be developed for each.

For Cub Scouts: Cub Scout canoeing, kayaking, rowing, and rafting do not include "trips" or "expeditions" and are not to be conducted on running water (i.e., rivers or streams); therefore, some procedures are inapplicable. Suitable weather requires clear skies, no appreciable wind, and warm air and water.

8. Equipment

All equipment must be suited to the craft, to water conditions, and to the individual; must be in good repair; and must satisfy all state and federal requirements. Spare equipment or repair materials must be carried. Appropriate rescue equipment must be available for immediate use.

9. Discipline

All participants should know, understand, and respect the rules and procedures for safe unit activity afloat. The applicable rules should be presented and learned prior to the outing, and should be reviewed for all participants at the water's edge just before the activity begins. When Scouts know and understand the reasons for the rules, they will observe them. When fairly and impartially applied, rules do not interfere with the fun. Rules for safety, plus common sense and good judgment, keep the fun from being interrupted by tragedy.

Note: For cruising vessels (excluding rowboats, canoes, kayaks, and rafts, but including sailboats and powerboats greater than 20 feet long) used in adult-supervised unit activities by a chartered Venturing crew/ship specializing in watercraft operations, or used in adult-supervised program activity in connection with any high-adventure program or other activity under the direct sponsorship and control of the National Council, the standards and procedures in the Sea Scout Manual may be substituted for the Safety Afloat standards.