

## WHITEWATER MERIT BADGE WORKBOOK

This Scoutmaster Bucky Merit Badge Workbook is based off the current *Scouts BSA Requirements*.

Consider also using the Whitewater merit badge class preparation page for clarification and expectations when participating in a Scoutmaster Bucky merit badge opportunity ([online](#) or [in-person](#)).

<https://scoutmasterbucky.com/merit-badges/whitewater/>

Scout's  
Name:

**REQUIREMENT 1:** Do the following:

**REQUIREMENT 1 A:** Explain to your counselor the most likely hazards you may encounter while participating in whitewater activities, including branches and trees in water along a shore and stretching across the stream, rocks, hydraulics over ledges or low-head dams, strong wind, low water or air temperature, and thunder and lightning storms. Explain what you should do to anticipate, help prevent, mitigate, and respond to these hazards.

Most likely hazards

Anticipate hazards

Prevent hazards

Mitigate hazards

Respond to hazards

**REQUIREMENT 1 B:** Review with your counselor the prevention, symptoms, and first-aid treatment for the following injuries or illnesses that could occur while participating in whitewater activities including cold-water shock; hypothermia; head, neck, and back injuries; heat-related illnesses; sunburn; dehydration; blisters; bruises; cuts; sprains and strains; shoulder dislocation; and submersion injuries.

Cold-water shock

Hypothermia

Head, neck, and back injuries

Heat-related illnesses

Sunburn

Dehydration

Blisters

Bruises

Cuts

Sprains and strains

Shoulder dislocation

Submersion injuries

**REQUIREMENT 1 C:** Discuss with your counselor the BSA Safety Afloat policy and the American Whitewater safety guidelines, including the use of helmet and life jackets.

**REQUIREMENT 2:** Do the following:

**REQUIREMENT 2 A:** Demonstrate understanding of the following river features by drawing lines to show the flow of water: upstream V, downstream V, eddy with an eddy line, ledge, river bend, current at different depths, drop, horizon line, and hydraulic.

Upstream V	Downstream V	Eddy with an eddy line
Ledge	River bend	Current at different deptsh
Drop	Horizon line	Hydraulic

**REQUIREMENT 2 B:** Describe how waves form including standing waves and wave trains.

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**REQUIREMENT 2 C:** Explain how to tilt or edge the boat without leaning your body

1 - When entering and exiting an eddy.

2 - When ferrying in downstream and upstream directions.

**REQUIREMENT 2 D:** Explain when, why, and how you should scout a river while ashore and while on the river and when you should portage your boat.

**REQUIREMENT 3:** Before doing requirements 4 through 12, earn the [Canoeing](#) merit badge if you will be using a canoe to earn this merit badge. If you will be using a kayak, earn the [Kayaking](#) merit badge. Then do the following:

**REQUIREMENT 3 A:** If you will be using a canoe to earn this merit badge, demonstrate strokes and maneuvers from the [Canoeing](#) merit badge to the satisfaction of your merit badge counselor.

Completed

**REQUIREMENT 3 B:** If you will be using a kayak to earn this merit badge, demonstrate strokes and maneuvers from the [Kayaking](#) merit badge to the satisfaction of your merit badge counselor.

Completed

**REQUIREMENT 4:** Do ONE of the following:

**REQUIREMENT 4 A:** If you are completing these requirements as a tandem canoeist, perform the following on calm water:

**REQUIREMENT 4 A 1:** Demonstrate the following strokes in the bow: cross forward, bow draw, cross bow draw, bow pry, and sculling draw.

Completed

**REQUIREMENT 4 A 2:** Demonstrate the following strokes in the stern: stern draw, stern pry, sculling draw, and forward with stern pry.

Completed

**REQUIREMENT 4 A 3:** Demonstrate a high brace, low brace, and righting pry.

Completed

**REQUIREMENT 4 B:** If you are completing these requirements as a solo canoeist, perform the following on calm water:

**REQUIREMENT 4 B 1:** Demonstrate the following strokes: cross forward, bow draw, cross bow draw, stern draw, pry, stern pry, sculling draw, and forward with stern pry.

Completed

**REQUIREMENT 4 B 2:** Demonstrate a high brace, low brace, and righting pry.

Completed

**REQUIREMENT 4 C:** If you are completing these requirements as a solo kayaker, perform the following on calm water:

**REQUIREMENT 4 C 1:** Demonstrate the following strokes: bow draw, rudder, and sculling draw.

Completed

**REQUIREMENT 4 C 2:** Demonstrate a high brace and low brace.

Completed

**REQUIREMENT 5:** Do the following:



**REQUIREMENT 5 A:** Explain the International Scale of River Difficulty and apply the scale to the stretch of river approved by your counselor.

**REQUIREMENT 5 B:** Identify the specific characteristics of the river that are factors in your classification according to the International Scale.

**REQUIREMENT 5 C:** Discuss how the level of flow changes a river from one class to another and what effects different flow rates have on the features of a river and its hazards.

**REQUIREMENT 6:** Explain the importance of communication during every whitewater outing. Demonstrate knowledge and ability to use the following American Whitewater Universal River Signals, both visual and auditory: "Stop," "Are you OK?," "Help/emergency," "Run river right," "Run river left," and "All clear—come ahead."

**REQUIREMENT 7:** Do ONE of the following:

a - If completing this merit badge in a canoe, describe the various types of canoes used on moving water and how they differ in design, materials, and purpose.

OR

b - If completing this merit badge in a kayak, describe the various types of kayaks used on moving water and explain how they differ in design, materials, and purpose.

**REQUIREMENT 8:** Discuss the personal and group equipment necessary for a safe whitewater outing and how and why it is used. Explain how to pack and protect these items.

**REQUIREMENT 9:** Demonstrate your ability to read a Class II section of river approved by your counselor. Describe the most desirable paths or lines of travel as well as alternative routes and options. Point out how to use the existing water features to your advantage, and explain how to best avoid the hazards present.

**REQUIREMENT 10:** Wearing a proper life jacket and being appropriately dressed for the weather and water conditions, perform the following skills in moving water in a properly equipped whitewater craft of your choice (tandem canoe, solo canoe, or solo kayak). If a tandem canoe is used, the skills must be demonstrated from both the bow and stern positions.

**REQUIREMENT 10 A:** Launch and land.

Completed

**REQUIREMENT 10 B:** Paddle forward in a straight line at least 10 boat lengths.

Completed

**REQUIREMENT 10 C:** Backpaddle in a straight line at least five boat lengths.

Completed

**REQUIREMENT 10 D:** Ferry upstream from both sides of the river.

Completed

**REQUIREMENT 10 E:** Ferry downstream from both sides of the river.

Completed

**REQUIREMENT 10 F:** Eddy turn from both sides of an eddy.

Completed

**REQUIREMENT 10 G:** Peel out from both sides of an eddy.

Completed

**REQUIREMENT 11:** Explain and demonstrate the following to your counselor:

**REQUIREMENT 11 A:** Self-rescue and procedures when capsized in moving water, including a wet exit if necessary

Explain

Empty text area for explanation.

Demonstrated

**REQUIREMENT 11 B:** Proper use of a throw rope to rescue a swimmer in whitewater

Explain

Demonstrated

**REQUIREMENT 11 C:** Proper technique for receiving a throw rope as a swimmer

Explain

Demonstrated

**REQUIREMENT 11 D:** Portaging—where portaging would be appropriate, and when and how to do it

Explain

Demonstrated

**REQUIREMENT 11 E:** The whitewater buddy system using at least three persons and three craft

Explain

Demonstrated

**REQUIREMENT 12:** Participate in one or more whitewater trips using either a canoe or kayak on a Class I and/or Class II river. The trip(s) must involve at least six hours of paddling time. For each trip:

**REQUIREMENT 12 A:** Help to prepare a written plan, specifying the route (put-ins and take-outs), schedule, equipment, safety precautions, and emergency procedures.

**REQUIREMENT 12 B:** Determine local rules and obtain permission from landowners and land managers in advance.

**REQUIREMENT 12 C:** Explain what steps have been taken to comply with BSA Safety Afloat and the American Whitewater safety guidelines.

**REQUIREMENT 12 D:** Show how to protect personal and group equipment from water and how to load and secure the containers in boats to be used in the trip. Execute the plans with other paddlers.

**REQUIREMENT 12 E:** Explain to your counselor how well your plans worked for each trip taken.