

MERIT BADGE	LOCATION	PRE-REQUISITES	REQUIRED ITEM/ATTIRE
ALL PRE-REQUISITES ARE SUBJECT TO CHANGE			
3D Archery	Archery Range	Must have the archery merit badge	
Action Archery	Archery Range	Must have the archery merit badge	
Animation/ Moviemaking	Boyd Pavillion		
American Culture/ American Heritage	Boyd Pavillion	American Heritage 3c. Research your family's history. Find out how various events and situations in American history affected your family. If your family immigrated to America, tell the reasons why. Share what you find with your counselor.	
Archery	Archery Range		
Astronomy	Nature Lodge		
ATV	West Berry past the Fort	Must be 14 years of age or older	Jeans, Long shirt, Boots
Automotive Maintenance/Traffic Safety	Ranger Shop		
Basketry	Boyd Pavillion		

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Camping		<p>3. Make a written plan for an overnight trek and show how to get to your camping spot by using a topographical map and one of the following:</p> <ul style="list-style-type: none"> (a) Compass. (b) GPS reciever. (c) Smartphone with a GPS app. <p>4a. Make a duty roster showing how your patrol is organized for an actual overnight campout. List assignments for each member.</p> <p>4b. Help a Scout patrol or a Webelos Scout unit in your area prepare for an actual campout, including creating the duty roster, menu planning, equipment needs, general planning, and setting up camp.</p> <p>5e. Present yourself to your Scoutmaster with your pack for inspection. Be correctly clothed and equipped for an overnight campout.</p> <p>7. Prepare for an overnight campout with your patrol by doing the following:</p> <ul style="list-style-type: none"> (a) Make a checklist of personal and patrol gear that will be needed. (b) Pack your own gear and your share of the patrol equipment and food for proper carrying. Show that your pack is right for quickly getting what is needed first, and that it has been assembled properly for comfort, weight, balance, size, and neatness. <p>8c. At least one of those meals must be a trail meal requiring the use of a lightweight stove.</p> <p>8d. Cook at least one breakfast, one lunch, and one dinner for your patrol from the meals you have planned for requirement 9a. Camp a total of at least 20 days and 20 nights. Sleep each night under the sky or in a tent you have pitched. The 20 days and 20 nights must be at a designated Scouting activity or event. You may use a week of long-term camp toward this requirement. If the camp provides a tent that has already been pitched, you need not pitch your own tent.</p> <p>9b. On any of these camping experiences, you must do TWO of the following, only with proper preparation and under qualified supervision.</p> <ul style="list-style-type: none"> (1) Hike up a mountain, gaining at least 1,000 vertical feet. (2) Backpack, snowshoe, or cross-country ski for at least 4 miles. 6 (3) Take a bike trip of at least 15 miles or at least four hours. (4) Take a non-motorized trip on the water of at least four hours or 5 miles. (5) Plan and carry out an overnight snow camping experience. (6) Rappel down a rappel route of 30 feet or more. <p>9c. On any of these camping experiences, perform a conservation project approved by the landowner or land managing agency. This can be done alone or with others.</p>	
Canoeing	Lake of the Pines	Successfully complete the BSA swimmer test.	Swim attire preferred
Chemistry		<p>3. Chemistry and Cooking. After successfully completing requirement 1, do EACH of the following:</p> <ul style="list-style-type: none"> (b) Prepare and use red cabbage indicator to measure the pH of five common household liquids, including water. Discuss your observations with your counselor. 	
Chess			

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Citizenship in the Nation	Scoutmaster Corral	<p>7. Do TWO of the following:</p> <p>(a) Visit a place that is listed as a National Historic Landmark or that is on the National Register of Historic Places. Tell your counselor what you learned about the landmark or site and what you found interesting about it.</p> <p>(b) Tour your state capitol building or the U.S. Capitol. Tell your counselor what you learned about the capitol, its function, and the history.</p> <p>(c) Tour a federal facility. Explain to your counselor what you saw there and what you learned about its function in the local community and how it serves this nation.</p> <p>(d) Choose a United States national monument that interests you. Using books, brochures, the internet (with your parent or guardian's permission), and other resources, find out more about the monument. Tell your counselor what you learned, and explain why the monument is important to this country's citizens.</p>	
Climbing	Climbing Tower		
Communications/ Public Speaking	Scoutmaster Corral	<p>5. Attend a public meeting (city council, school board, debate) approved by your counselor where several points of view are given on a single issue. Practice active listening skills and take careful notes of each point of view. Prepare an objective report that includes all points of view that were expressed, and share this with your counselor.</p>	

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Cooking	Gardner Pavillion	<p>Cooking at Home. Do the following:</p> <p>4a. Using the MyPlate food guide or the current USDA nutrition model, plan menus for three full days of meals (three breakfasts, three lunches, and three dinners) plus one dessert. Your menus should include enough to feed yourself and at least one adult, keeping in mind any special needs (such as food allergies) and how you keep your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals.</p> <p>4b. Find recipes for each meal. Create a shopping list for your meals showing the amount of food needed to prepare for the number of people you will serve. Determine the cost for each meal.</p> <p>4c. Share and discuss your meal plan and shopping list with your counselor.</p> <p>4d. Using at least five of the 10 cooking methods from requirement 3, prepare and serve yourself and at least one adult (parent, family member, guardian, or other responsible adult) one breakfast, one lunch, one dinner, and one dessert from the meals you planned. The meals for requirement 4 may be prepared on different days, and they need not be prepared consecutively. Those served need not be the same for all meals.</p> <p>4e. Time your cooking to have each meal ready to serve at the proper time. Have an adult verify the preparation of the meal to your counselor.</p> <p>4f. After each meal, ask a person you served to evaluate the meal on presentation and taste, then evaluate your own meal. Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how planning and preparation help ensure a successful meal.</p> <p>Note: The meals prepared for Cooking merit badge requirements 4, 5, and 6 will count only toward fulfilling those requirements and will not count toward rank advancement or other merit badges. Meals prepared for rank advancement or other merit badges may not count toward the Cooking merit badge. You must not repeat any menus for meals actually prepared or cooked in requirements 4, 5, and 6.</p>	
Digital Technology			
Env. Science	Nature Lodge		
Emergency Preparedness	Scoutmaster Corral	<p>3a. At a family meeting, discuss the situations on the chart you created for requirement 2b and make emergency plans for sheltering-in-place and for evacuation of your home. Discuss your family meeting and plans with your counselor.</p> <p>3b. Develop and practice a plan of escape for your family in case of fire in your home. Draw a floor plan with escape routes and a map with a safe meeting place. Discuss your family's home escape plan with your counselor.</p> <p>3c. Using a checklist in the Emergency Preparedness Merit Badge pamphlet or one approved by your counselor, prepare or inspect a family disaster kit for sheltering-in-place and for evacuation of your home. Review the needs and uses of the items in a kit with your counselor.</p> <p>8b. Find out how your community and its leaders work to manage and to train for disasters. Discuss this information with your counselor, using the information you learned from requirement 1b.</p>	

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Energy/Electricity	Yammine Lodge	<p>Energy</p> <p>4. Conduct an energy audit of your home. Keep a 14 day log that records what you and your family did to reduce energy use. Include the following in your report and, after the 14-day period, discuss what you have learned with your counselor.</p> <p>4a. List the types of energy used in your home such as electricity, wood, oil, liquid petroleum, and natural gas, and tell how each is delivered and measured, and the current cost; OR record the transportation fuel used, miles driven, miles per gallon, and trips using your family car or another vehicle.</p> <p>Electricity</p> <p>2. Complete an electrical home safety inspection of your home, using the checklist found in this pamphlet or one approved by your counselor. Discuss what you find with your counselor.</p>	
Exploration			
Farm Mechanics	Ranger Shop	5. Visit an implement dealer. Interview the dealer technician or service manager for hints on good preventive maintenance. Ask why it is important, the costs, and what causes wear or damage. Report what you learn.	
Field Archery	Archery Range	Must have the archery merit badge	
First Aid	Scoutmaster Corral	<p>2b. (1) Assemble a personal first-aid kit for hiking and backpacking. Demonstrate the proper use of each item in your first-aid kit to your counselor.</p> <p>14. With guidance from your counselor, develop a plan to teach a first-aid skill or topic using the EDGE method. Discuss your skill, topic, and plan with your counselor, and then teach your skill or topic to your family or to one or more Scouts.</p>	
Fish and Wildlife Management	Nature Lodge		
Fishing		7. Obtain & review the regulations affecting game fishing where you live. Explain why they were adopted and what is accomplished by following them.	
Geocaching		7. With your parent or guardian's permission, go to www.geocaching.com . Type in your city and state to locate public geocaches in your area. Share with your counselor the posted information about three of those geocaches. Then, pick one of the three and find the cache.	
Geology	Nature Lodge		
Golf	Parking lot by Archery Range	Scouts will complete the disc golf option, and will not be playing traditional golf.	
Home Repairs	Ranger Shop		
Horsemanship			Must bring jeans and heeled boots
Inventing	Yammine Lodge	<p>8. Do ONE of the following:</p> <p>(a) Participate with a club or team (robotics team, science club, or engineering club) that builds a useful item. Share your experience with your counselor.</p> <p>(b) Visit a museum or exhibit dedicated to an inventor or invention, and create a presentation of your visit to share with a group such as your troop or patrol.</p>	
Kayaking	Lake of the Pines	Successfully complete the BSA swimmer test.	Swim attire preferred
Leatherwork	Boyd Pavillion		
Lifesaving	Pool	<p>2a. Earn the Swimming merit badge.</p> <p>16b. Demonstrate CPR knowledge and skills, including rescue breathing, on a mannequin under the guidance of a current CPR/AED instructor trained by a nationally certified provider.</p>	
Mammal Study	Nature Lodge		

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Music	Boyd Pavillion		Personal Musical Instrument
Nature	Nature Lodge		
Nuclear Science			
Painting	Boyd Pavillion		
Personal Fitness	Parking Lot by Archery Range	<p>1b. Have a dental examination. Get a statement saying that your teeth have been checked and cared for. Tell how to care for your teeth.</p> <p>The following requirement must be completed after camp 8. Complete the physical fitness program you outlined in requirement 7. Keep a log of your fitness program activity (how long you exercised; how far you ran, swam, or biked; how many exercise repetitions you completed; your exercise heart rate; etc.). Keep a log of your weekly healthy eating goals. Repeat the aerobic fitness, muscular strength, and flexibility tests every four weeks and record your results. After the 12th week, repeat all of the required activities in each of the three test categories, record your results, and show improvement in each one. Discuss how well you met your healthy eating goals over these 12 weeks. Discuss the meaning and benefit of your experience, and describe your long-term plans regarding your personal fitness.</p>	
Pioneering/ Wilderness Survival		<p>Wilderness Survival:</p> <p>5. Put together a personal survival kit and explain how each item in it could be useful.</p>	Personal survival kit, plastic tarp
Plant Science	Nature Lodge	<p>5. Tell how to propagate plants by seeds, roots, cuttings, tubers, and grafting. Grow a plant by ONE of these methods.</p>	
Plumbing	Ranger Shop		
Oceanography	Nature Lodge	<p>Do ONE of the following:</p> <p>7a. Make a plankton net. Tow the net by a dock, wade with it, hold it in a current, or tow it from a rowboat. Do this for about 20 minutes. Save the sample. Examine it under a microscope or high-power glass. Identify the three most common types of plankton in the sample.</p> <p>7b. Make a series of models (clay or plaster and wood) of a volcanic island. Show the growth of an atoll from a fringing reef through a barrier reef. Describe the Darwinian theory of coral reef formation.</p> <p>7c. Measure the water temperature at the surface, midwater, and bottom of a body of water four times daily for five consecutive days. You may measure depth with a rock tied to a line. Make a Secchi disk to measure turbidity (how much suspended sedimentation is in the water). Measure the air temperature. Note the cloud cover and roughness of the water. Show your findings (air and water temperature, turbidity) on a graph. Tell how the water temperature changes with air temperature.</p> <p>7d. Make a model showing the inshore sediment movement by littoral currents, tidal movement, and wave action. Include such formations as high and low waterlines, low-tide terrace, berm, and coastal cliffs. Show how offshore bars are built up and torn down.</p> <p>7e. Make a wave generator. Show reflection and refraction of waves. Show how groins, jetties, and breakwaters affect these patterns.</p> <p>7f. Track and monitor satellite images available on the Internet for a specific location for three weeks. Describe what you have learned to your counselor.</p>	

MERIT BADGE	LOCATION	PRE-REQUISITES	REQUIRED ITEM/ATTIRE
Rifle	Rifle Range		
Robotics	Office		
Rowing	Lake of the Pines	Successfully complete the BSA swimmer test.	Swim attire preferred
Search and Rescue		<p>4. Find out who in your area has authority for search and rescue and what their responsibilities are. Discuss this with your counselor, and explain the official duties of a search and rescue team.</p> <p>10. Find out about three career or volunteer opportunities in search and rescue. Pick one and find out the education, training, and experience required for this professional or volunteer position. Discuss this with your counselor, and explain why this position might interest you.</p>	
Shotgun	Shotgun Range	Must be 14 years of age or older	
Signs, Signals, + Codes	Yamine Lodge	7. On a Scout outing, lay out a trail for your patrol or troop to follow. Cover at least one mile in distance and use at least six different trail signs and markers. After the Scouts have completed the trail, follow the Leave No Trace Seven Principles and the Outdoor Code by replacing or returning trail markers to their original locations.	
Skating	Parking Lot by Archery Range		Must bring your own roller skates, inline skates, or skateboard, and safety equipment. (Helmet, knee pads, elbow pads)
Surveying			
Sustainability	Nature Lodge		
Swimming	Pool		One piece swim suit/trunks
Textile	Boyd Pavillion		
Weather	Nature Lodge		
Welding	Ranger Shop		Jeans, Boots Preferable
Woodcarving	Boyd Pavillion	2a: Earn the Totin' Chip recognition.	

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