

## Pre-Reqs for Merit Badges Winnebago Scout Reservation

### **Archery**

*Review Merit Badge Pamphlet and Bring to Class*

### **Basketry**

*\$15 for kits*

### **Canoeing**

*Proper footwear.*

### **Cooking**

**4 Cooking at home.** *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 kept your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals.*

*Then do the following:*

- a. Create a shopping list for your meals showing the amount of food needed to prepare and serve each meal, and the cost for each meal.*
- b. Share and discuss your meal plan and shopping list with your counselor.*
- c. 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. \**
- d. 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.*
- e. 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 better planning and preparation help ensure a successful meal.*

## **Electronics**

None

## **Emergency Preparedness**

1. Earn the First Aid merit badge.

2 (c) Meet with and teach your family how to get or build a kit, make a plan, and be informed for the situations on the chart you created for requirement 2b. Complete a family plan. Then meet with your counselor and report on your family meeting, discuss their responses, and share your family plan.

8 (b) Prepare a personal emergency service pack for a mobilization call. Prepare a family kit (suitcase or waterproof box) for use by your family in case an emergency evacuation is needed. Explain the needs and uses of the contents.

9 Do ONE of the following:

**(a) Using a safety checklist approved by your counselor, inspect your home for potential hazards. Explain the hazards you find and how they can be corrected.**

(b) Review or develop a plan of escape for your family in case of fire in your home.

(c) Develop an accident prevention program for five family activities outside the home (such as taking a picnic or seeing a movie) that includes an analysis of possible hazards, a proposed plan to correct those hazards, and the reasons for the corrections you propose.

## **Engineering**

None

## **Environmental Sciences**

**3. Do ONE activity from EACH of the following categories (using the activities in this {the merit badge} pamphlet as the basis for planning and projects):**

### *3e. Endangered Species*

- 1. Do research on one endangered species found in your state. Find out what its natural habitat is, why it is endangered, what is being done to preserve it, and how many individual organisms are left in the wild. Prepare a 100-word report about the organism, including a drawing. Present your report to your patrol or troop.*
- 2. Do research on one species that was endangered or threatened but which has now recovered. Find out how the organism recovered, and what its new status is. Write a 100-word report on the species and discuss it with your counselor.*
- 3. With your parent's and counselor's approval, work with a natural resource professional to identify two projects that have been approved to improve the habitat for a threatened or endangered species in your area. Visit the site of one of these projects and report on what you saw.*

### *3f. Pollution Prevention, Resource Recovery, and Conservation*

- 1. Look around your home and determine 10 ways your family can help reduce pollution. Practice at least two of these methods for seven days and discuss with your counselor what you have learned.*
- 2. Determine 10 ways to conserve resources or use resources more efficiently in your home, at school, or at camp. Practice at least two of these methods for seven days and discuss with your counselor what you have learned.*
- 3. Perform an experiment on packaging materials to find out which ones are biodegradable. Discuss your conclusion with your counselor.*
- 5. Using the construction project provided or a plan you create on your own, identify the items that would need to be included in an environmental impact statement for the project planned.*

## **Fingerprinting**

*None*

## **First Aid**

*5. Do the following:*

- a. Prepare a first-aid kit for your home. Display and discuss its contents with your counselor.*
- b. With an adult leader. Inspect your troop's first-aid kit. Evaluate it for completeness. Report your findings to your counselor and Scout leader.*

## Geocaching

7. With your parent's permission[1], go to [www.geocaching.com](http://www.geocaching.com). Type in your city and state to locate public geocaches in your area. Share the posted information about three of those geocaches with your counselor. Then, pick one of the three and find the cache.

8. Do ONE of the following:

a. If a Cache to Eagle® series exists in your council, visit at least three of the 12 locations in the series. Describe the projects that each cache you visit highlights, and explain how the Cache to Eagle® program helps share our Scouting service with the public.

b. Create a Scouting-related Travel Bug® that promotes one of the values of Scouting. "Release" your Travel Bug into a public geocache and, with your parent's permission, monitor its progress at [www.geocaching.com](http://www.geocaching.com) for 30 days. Keep a log, and share this with your counselor at the end of the 30-day period.

c. Set up and hide a public geocache, following the guidelines in the Geocaching merit badge pamphlet. Before doing so, share with your counselor a three-month maintenance plan for the geocache where you are personally responsible for those three months. After setting up the geocache, with your parent's permission, follow the logs online for 30 days and share them with your counselor. You must archive the geocache when you are no longer maintaining it.

d. Explain what Cache In Trash Out (CITO) means, and describe how you have practiced CITO at public geocaches or at a CITO event. Then, either create CITO containers to leave at public caches, or host a CITO event for your unit or for the public.

## Indian Lore

None

## Leatherwork

Bring \$7 for kits

## Kayaking

None

## Metalwork

None

## Model Design and Building

Do ONE of the following:

1) Make an architectural model. Build a model of a house to a scale of  $\frac{1}{4}'' = 1'0''$  (50:1 metric). Discuss with your counselor the materials you intend to use, the amount of detail required, outside treatment (finish, shrubbery, walks, etc.) and color selections. After completing the model, present it to your counselor for approval.

2) Build a structural model. Construct a model showing corner construction of a wood frame building to a scale of  $1\frac{1}{2}'' = 1'0''$  (8:1 Metric). All structures shown must be to scale. Cardboard or flat sheet wood stock may be used for sheeting or flooring on the model. Review with your counselor the problems you encountered in gathering the materials and supporting the structure. Be able to name the parts of the floor and wall frames, such as intermediate girder, joist, bridging, subfloor, sill, sole plate, stud and rafter.

3) Make a process model. Build a model showing the plumbing system in your house. Show hot and cold water supply, all waste returns, and venting to a scale of  $\frac{3}{4}'' = 1'0''$  (15:1 Metric). Talk to your counselor about how to begin this model, and present the scale and the materials you will use. After completion, present the model to your counselor and be prepared to discuss any problems you had building this model.

4) Complete a mechanical model. Build a model of a mechanical device that uses at least two of the six simple machines. After completing the the model, present it to your counselor. Be prepared to discuss materials used, the machine's function, and any particular difficulty you may have encountered.

5) Make an industrial model. Build a model of an actual passenger-carrying vehicle to a scale of  $1'' = 1'0''$  or  $\frac{1}{2}'' = 1'0''$  (10:1 or 25:1 Metric). Take the dimensions of the vehicle, and record the important dimensions. Draw the top, front, rear, and sides of the vehicle to scale. From your plans, build a model of the vehicle to scale. From your plans, build a model of the vehicle and finish in a craftsmanlike manner. Discuss with your counselor the most difficult part of completing the model.

5. Build a special-effects model of a fantasy spacecraft that might appear in a Hollywood science-fiction movie. Determine an appropriate scale for your design - one that makes practical sense. Include a cockpit or control area, living space, storage unit, engineering spaces, and propulsion systems. As you plan and build your model, do the following:

- a) Study aircraft, submarines, and naval ships for design ideas.
- b) Arrange and assemble the parts.
- c) Sketch your completed model.
- d) Write a short essay in which you discuss your design, scale, and materials choices. Describe how you engineered your model and discuss any difficulties you encountered and what you learned.

**Radio**

None

**Reptile and Amphibian Study**

8. Do ONE of the following:

*(a) Maintain one or more reptiles or amphibians for at least a month. Record food accepted, eating methods, changes in coloration, shedding of skins, and general habits; or keep the eggs of a reptile from the time of laying until hatching; or keep the eggs of an amphibian from the time of laying until their transformation into tadpoles (frogs) or larvae (salamanders). Whichever you chose, keep records of and report to your counselor how you cared for your animal/eggs/larvae to include lighting, habitat, temperature and humidity maintenance, and any veterinary care requirements.*

*(b) Choose a reptile or amphibian that you can observe at a local zoo, aquarium, nature center, or other such exhibit (such as your classroom or school). Study the specimen weekly for a period of three months. At each visit, sketch the specimen in its captive habitat and note any changes in its coloration, shedding of skins, and general habits and behavior. Discuss with your counselor how the animal you observed was cared for to include its housing and habitat, how the lighting, temperature, and humidity were maintained, and any veterinary care requirements.*

*Find out, either from information you locate on your own or by talking to the caretaker, what this species eats and what are its native habitat and home range, preferred climate, average life expectancy, and natural predators. Also identify any human-caused threats to its population and any laws that protect the species and its habitat. After the observation period, share what you have learned with your counselor.*

**Rifle Shooting**

*Review Merit Badge Pamphlet and Bring to Class*

**Robotics**

None

**Rowing**

*Proper footwear*

**Small-Boat Sailing**

*Proper footwear*

**Swimming**

*Long-Sleeved Shirt*

**Wilderness Survival**

None

**Wood Carving**

*\$5 for the kit.*

*2a. Earn the Totin' Chip.*