



# Scouts BSA Advancement Requirements Changes

Effective January 1, 2020

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BSA Publication 33216, which had been titled "*Boy Scout Requirements*" for many years, was renamed "*Scouts BSA Requirements*" beginning in 2019.

This web page shows the revisions made to requirements for ranks, merit badges and other advancement opportunities, in the 2020 edition of Scouts BSA Requirements

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## General Information

The *Guide to Advancement - 2019* (Publication No. 33088 - SKU 648216) and *2020 Scouts BSA Requirements* (Publication No. 33216 - SKU 653801) are the official Boy Scouts of America sources on Scouts BSA advancement procedures.

When there is a conflict between two published lists of requirements, such as *Scouts BSA Requirements* and a Merit Badge pamphlet or the *Scouts BSA handbooks*, the requirements book should normally be considered to be the controlling document, until a newer edition of *Scouts BSA Requirements* is issued. However, the following excerpt from the *Guide to Advancement, 2019* explains what to do when merit badge requirements change:

### 7.0.4.3 What to Do When Requirements Change

The current annual edition of *Scouts BSA Requirements* lists the official merit badge requirements. However, those requirements might not match those in the *Scouts BSA Handbook*, the merit badge pamphlets, and the requirements listed at [www.scouting.org/meritbadges](http://www.scouting.org/meritbadges) because the *Scouts BSA Requirements* book is updated on an annual basis. When new or revised merit badge requirements appear in the *Scouts BSA Requirements* book, any Scout beginning work on a merit badge must use the requirements as stated therein. However, if changes to merit badge requirements are introduced in a revised merit badge pamphlet or at [www.scouting.org/meritbadges](http://www.scouting.org/meritbadges) during the year after the Scouts BSA Requirements is released, then the Scout has through the end of that year to decide which set of requirements to use.

Once work has begun, the Scout may continue using the requirements he or she started

with until completion of the badge. Alternatively, the Scout may choose to switch to the revised requirements. Sometimes, however—especially for more significant changes—the *Scouts BSA Handbook*, the *Scouts BSA Requirements* book, [www.scouting.org/meritbadges](http://www.scouting.org/meritbadges), or official communications from the National Council may set forth a different procedure that must be used and may establish a date by when use of the old requirements must cease.

There is no time limit between starting and completing a badge, although a counselor may determine so much time has passed since any effort took place that the new requirements must be used.

The authoritative source for all merit badge requirements is the current year's *Scouts BSA Requirements* book.

In addition, the following information is included on the inside front cover of the 2020 edition of *Scouts BSA Requirements*:

The requirements listed in this *Scouts BSA Requirements* book for rank advancement, Eagle Palms, and merit badges are the official requirements of the Boy Scouts of America and are effective Jan. 1, 2020, through Dec. 31, 2020. However, the requirements on the following pages might not match those in the Scouts BSA handbooks and the merit badge pamphlets, because this publication is updated only on an annual basis. The most current and any updated merit badge requirements can be found at [www.scouting.org/meritbadges](http://www.scouting.org/meritbadges).

When new or revised merit badge requirements appear in this *Scouts BSA Requirements* book, any Scout beginning work on a merit badge must use the requirements as stated therein. However, if changes to merit badge requirements are introduced in a revised merit badge pamphlet or at [www.scouting.org/meritbadges](http://www.scouting.org/meritbadges) throughout the year, then the Scout has through the end of the current calendar year to decide which set of requirements to use.

Once a Scout begins work, the Scout may continue using the requirements the Scout started with until completion of the badge. Alternatively, the Scout may choose to switch to the revised requirements. Sometimes, however especially for more significant changes the Scouts BSA handbooks, the *Scouts BSA Requirements* book, [www.scouting.org/meritbadges](http://www.scouting.org/meritbadges), or official communications from the National Council may set forth a different procedure that must be used. The National Council may establish a new date for when use of the existing requirements must cease.

There is no time limit between starting and completing a badge, although a counselor may determine so much time has passed since any effort took place that the new requirements must be used.

No council, district, unit, or individual has the authority to add to, or to subtract from, any advancement or merit badge requirements, for more detailed information, see the Guide to Advancement, which is available online at [www.scouting.org/resources/guide-to-advancement](http://www.scouting.org/resources/guide-to-advancement)

On February 1, 2019, BSA changed the name of their program for youth between the ages of 11 and 18 from Boy Scouts to Scouts BSA, opened the program to young girls, and issued two editions of the *Scouts BSA handbooks* which replaced the *Boy Scout Handbook*.

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## Information in the 2020 *Scouts BSA Requirements* book

The list of changes on the inside front cover of the new edition of *Scouts BSA Requirements* identifies changes to the alternate requirements for the ranks of Scout, Tenderfoot, Second Class, and First Class, changes to 18 merit badges, and changes to 4 of the Special Opportunity awards.

In addition to the listed changes, we have identified small changes which were made to 3 other merit badges, and some additional minor changes to the merit badges in that listing which were not identified. We also noted that no changes were made to one of the merit badges listed, and that changes were made to the contact information for some of the religious awards. Details of all the changes are described below.

The Merit Badge Library listing on the inside back cover lists 40 merit badge pamphlets with 2019 editions. However, a check of the pamphlets available from Scoutshop.org (the internet website of the Supply Division), lists another 40 or more other merit badge pamphlets with new stock (SKU) numbers higher than some of the pamphlets with 2019 editions. Those SKU numbers appear to indicate that many other pamphlets have been or are going to be released.

### Index of Changes

#### RANK ADVANCEMENT CHANGES

#### Scout, Tenderfoot, Second Class and First Class Alternative Requirements

#### MERIT BADGES

<u>American Business*</u>	<u>Model Design and Building</u>
<u>American Heritage</u>	<u>Painting</u>
<u>Animal Science***</u>	<u>Personal Fitness</u>
<u>Athletics**</u>	<u>Reading</u>
<u>Bugling</u>	<u>Rifle Shooting****</u>
<u>Chemistry</u>	<u>Safety</u>
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<u>Geology</u>	<u>Whitewater</u>
<u>Kayaking</u>	

**\* Listed on inside front cover, but no changes**  
**\*\* Merit Badge changes but not listed on inside front cover**  
**\*\*\* Changes in addition to those listed on inside front cover**  
**\*\*\*\*Not listed on inside front cover and no changes, but a note is missing**

**Special Opportunities**

**Cyber Chip**  
**Nova and Supernova Awards**  
**Paul Bunyan Award**  
**Religious Emblems**  
**World Conservation Award**

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## Changes to Rank Requirements

### Scout, Tenderfoot, Second Class and First Class - Alternative Requirements

**Changes were made to this topic, the changes were as follows:**

A Scout with a permanent physical or mental disability or a disability expected to last more than two years or beyond the 18th birthday and who is unable to complete all of the requirements for Scout, Tenderfoot, Second Class, or First Class rank may, with his or her parent or guardian, submit a request to the council advancement committee to complete alternative requirements. Below are the procedures for applying for alternative requirements. To help facilitate this process, use the Individual Scout Advancement Plan, No. 512-936, which can be found at [www.scouting.org/advancement](http://www.scouting.org/advancement). For more detailed information about alternative requirements, see the Guide to Advancement.

1. **Do As Many *Standard Existing* Requirements As Possible.** Before applying for alternative requirements *a Scout must complete* as many of the existing requirements **must be completed** as possible
2. **Prepare a Request for Alternative Requirements.** Once the *Scout has done his or her best* **Scout's best has been done** to the limit of the Scout's abilities and resources, the unit leader or a troop committee member submits to the council advancement committee a written request for alternative requirements for Scout, Tenderfoot, Second

Class, or First Class ranks. It must show what has been completed and suggest the alternatives for those requirements the Scout cannot do.

3. **Secure a Medical Statement and Provide Supporting Documents.** The request must be accompanied by supporting letters from the unit leader, a parent or guardian, and the Scout (if possible), as well as a written statement from a qualified health professional related to the nature of the disability. This may be, **for example**, a physician, neurologist, psychiatrist, psychologist, etc., or, when appropriate, an educational administrator in special education. Statements must describe the disability; cover the Scout's capabilities, limitations, and prognosis; and outline what requirements cannot be completed. Additional information such as Individualized Education Plans (IEP) provided to parents by schools, and various treatment summaries and reports, may help an advancement committee make an informed decision.
4. **The Advancement Committee Reviews the Request.** The council advancement committee reviews the request, utilizing the expertise of professionals involved with youth who have special needs. To make a fair determination, the committee may want to interview the Scout, ~~his or her parent or guardian~~ **the Scout's parent(s) or guardian(s)**, and the unit leader. The committee's decision is then recorded and delivered to the Scout and the unit leader.

## REVISED Merit Badges



### American Business

Although listed as "Completely revised" on the inside front cover, the text contains no changes from the requirements that were included in the 2019 edition.



### American Heritage

Changes were made to requirements 3a, 3b, and 4a. The changes were as follows:

3.
  - a. Select a topic **related to the United States** that is currently in the news. Describe to your counselor what is happening. Explain how today's events are related to or affected by the events and values of America's past.
  - b. For each of the following, describe its adoption, tell about any changes since its adoption, and explain how each one continues to influence Americans today: the flag, the Pledge of Allegiance, the ~~seal~~ **Great Seal of the United States**, the motto, and the national anthem.
4.
  - a. Explain what is meant by the National Register of Historic Places. ~~Describe~~ **and** how a property becomes eligible for listing **in the National Register of Historic Places**. Make a map of your local area, marking the points of historical interest. Tell about any National Register properties in your area. Share the map with your counselor, and describe the historical points you have indicated.



## Animal Science

Changes were made to requirements 3 and 6-Sheep Option c1, Hog Option c1, and Avian Option d1, d2, and e. The changes to Sheep Option c1, Hog Option c1, and Avian Option d1 were not noted in the listing on the inside front cover. The changes are as follows:

3. Explain the *major* differences in the digestive systems of ruminants, horses, pigs, and poultry. Explain how the differences structure and function among these *four* types of digestive tracts affect the nutritional management of these species.
6.
  - o SHEEP OPTION
    - c. 1. Raise a lamb from weaning to market weight. Keep records of feed intake, weight gains, medication, vaccination, and mortality. Present your records *for review by your counselor* **to your counselor for review.**
  - o HOG OPTION
    - c. 1. Raise a feeder pig from weaning to market weight. Keep records of feed intake, weight gains, medication, vaccination, and mortality. Present your records *for review by your counselor* **to your counselor for review.**
  - o AVAIN OPTION
    - d. 1. Manage an egg-producing flock for five months. Keep records of feed purchased, eggs sold, medication, vaccination, and mortality. Present your records *for review by your counselor* **to your counselor for review.**
    2. Raise ~~20 chicks~~ **five chickens** from hatching. Keep records of feed intake, weight gains, medication, vaccination, and mortality. Present your records *for review by your counselor* **to your counselor for review.**
    - e. Define the following terms: *chick, pullet,* hen, rooster, *cockerel, cock,* **chick,** capon, tom, poult.



## Athletics

A note that appeared before requirement 1 was removed. This change was not noted in the listing on the inside front cover. The change is as follows:

*Requirement 2a is being added for health and safety, and to provide consistency with the Personal Fitness merit badge.*



## Bugling

Changes were made to requirements 3 and 4. The changes are as follows:

3. Sound **10 of** the following bugle calls: "First Call," "Reveille," "Assembly," "Mess," "Drill," "Fatigue," "Officers," "Recall," "Church," "Swimming," "Fire," "Retreat," "To the Colors," "Call to Quarters," and "Taps."
  4. Explain *when* **the use of** each of the calls *in-requirement 3 is used* **you performed**.
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## Chemistry

Changes were made to requirements 2b, 6a, 6b, 6c1, 6c3, 6d, 7a, and 7c, and requirement 6c4 was deleted. The changes are shown below.

2. b. *Describe* **Demonstrate** how you would separate sand (**or gravel**) from water, **Describe how you would separate** table salt from water, oil from water, and gasoline from motor oil. Name the practical processes that require these kinds of separations **and how the processes may differ**.
  6. a. Name two government agencies that are responsible for tracking the use of chemicals for commercial or industrial use. Pick one agency and briefly describe its responsibilities *to the public and the environment*.
  - b. Define pollution. Explain the chemical *effects of ozone, and global climate change. Pick a current environmental problem as an example. Briefly describe what people are doing to resolve this hazard and to increase understanding of the problem.* **impacts on the ozone layer and global climate change**.
  - c.
    1. The production of aluminum cans *or plastic milk cartons*.
    3. *Used motor oil* **Single-use items, such as water bottles, bags, straws, or paper**
    4. *Newspaper*
  - d. Briefly describe the purpose of phosphates in fertilizer and in laundry detergent. Explain how the use of phosphates in fertilizers affects the environment. *Also, explain* **Explain** why phosphates have been removed from laundry detergents.
  7. a. Visit a laboratory and talk to a *practicing* chemist. Ask what *the* **that** chemist does, and what training and education are needed to work as a chemist.
  - c. Visit an industrial plant that makes chemical products or uses chemical processes and describe the processes used. What, if any, *pollutants* **by-products** are produced and how they are handled.
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## Cooking

Small changes were made to requirements 4 and 4e as shown below. These changes were not noted in the listing on the inside front cover.

4. **Cooking at Home.** Using the MyPlate food guide or the current USDA nutrition model, plan a menu for three full days of meals (three breakfasts, three lunches, and three dinners) plus one dessert. Your menu 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* **keep** your foods safe and free from cross-contamination. List the equipment and utensils needed to

prepare and serve these meals.

Then do the following:

- 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.



## Crime Prevention

**A change was made to requirement 8a as shown below.**

8. a. How drug abuse awareness programs, ~~such as "Drugs: A Deadly Game,"~~ help prevent crime



## Environmental Science

**Changes were made to requirements 3, 4a, and 4b, plus the note before requirement 3g3, and requirement 3h was added.. The changes are as follows:**

3. Do ONE activity from **EACH seven** of the following categories (using the activities in this *{the merit badge}* pamphlet as the basis for planning and projects):
  - g. 2.

**Before you choose requirement 3g(3), you will need to first find out whether you are allergic to bee stings. Visit an allergist or your family physician to find out. If you are allergic to bee stings, you should choose another option within requirement 3. In completing requirement 3g(3), your counselor can help you find an established beekeeper to meet with you and your buddy. Ask whether you can help hive a swarm or divide a colony of honey bees. Before your visit, be sure your buddy is not allergic to bee stings. For help with locating a beekeeper in your state, visit [www.beeculture.com](http://www.beeculture.com) and click on "*Bee* Resources," then select "**Find Help**" and "Find a Local Beekeeper."**

3.
  - h. *Invasive Species*
    1. **Learn to identify the major invasive plant species in your community or camp and explain to your counselor what can be done to either eradicate or control their spread.**
    2. **Do research on two invasive plant or animal species in your community or camp. Find out where the species originated, how they were transported to the United States, their life history, how they are spread, and the recommended means to**

**eradicate or control their spread. Report your research orally or in writing to your counselor.**

3. **Take part in a project of at least one hour to eradicate or control the spread of an invasive plant species in your community or camp.**
  4.
    - a. Mark off a plot of 4 square yards in each study area, and count the number of species found there. Estimate how much space is occupied by each plant species and the type and number of nonplant species you find. *Write a report that adequately discusses* **Report to your counselor orally or in writing** the biodiversity and population density of these study areas. *Discuss your report with your counselor.*
    - b. Make at least three visits to each of the two study areas (for a total of six visits), staying for at least 20 minutes each time, to observe the living and nonliving parts of the ecosystem. Space each visit far enough apart that there are readily apparent differences in the observations. Keep a journal that includes the differences you observe. *Then, write a short report that adequately addresses your observations, including how the differences of the study areas might relate to the differences noted, and discuss this* **Discuss your observations** with your counselor.
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## Geology

**A new requirement 5d2 was added and requirements 5d2-5d5 were renumbered as 5d3 -5d6. The changes were as follows:**

5.
    - d.
      2. **Explain the theory of plate tectonics.**
      3. ~~2.~~ Explain to your counselor the processes of burial and fossilization, and discuss the concept of extinction.
      4. ~~3.~~ Explain to your counselor how fossils provide information about ancient life, environment, climate, and geography. Discuss the following terms and explain how animals from each habitat obtain food: benthonic, pelagic, littoral, lacustrine, open marine, brackish, fluvial, eolian, protected reef.
      5. ~~4.~~ Collect 10 different fossil plants or animals OR (with your counselor's assistance) identify 15 different fossil plants or animals. Record in a notebook where you obtained (found, bought, traded) each one. Classify each specimen to the best of your ability, and explain how each one might have survived and obtained food. Tell what else you can learn from these fossils.
      6. ~~5.~~ Do ONE of the following:
- 



## Kayaking

**Changes were made to requirements 3b,4c, 7b, 8a, 8b, and 8e. Requirement 5b was revised and split into 5b and 5c. New requirements 8f and 8g were added and requirement 4d was deleted. The changes are shown below:**

3. b. Review the importance of safety equipment such as a signal device, extra paddle, sponge, bilge pump, rescue sling, **flotation bags**, and throw bag.
4. c. ~~Review the advantages and disadvantages of the materials most commonly used to make kayaks.~~ Explain the care, maintenance, and storage of a kayak.
- d. ~~Using the trucker's hitch and bowline, demonstrate how to secure a kayak to a rack on a vehicle or a trailer, or to a rack on land.~~
5. b. ~~The different materials from which paddles are made, parts of a paddle, and the care and maintenance of a paddle~~  
**Parts of a paddle.**
- c. **The care and maintenance of a paddle.**
7. b. ~~Backstroke~~ **Reverse stroke**
8. a. Paddle a straight line for ~~25 yards, make a sharp turn, and return 25 yards in a straight line.~~ **15 to 20 boat lengths using appropriate strokes while maintaining trim and balance of the kayak.**
- b. Spin or pivot ~~360 degrees to the right and 360 degrees to the left.~~ **from a stationary position 180 degrees (half circle) to the right and left within two boat lengths.**
- e. ~~Paddle a buoyed course of a length determined by your counselor that includes two right and two left turns performed while underway.~~  
**While maintaining forward motion, turn the kayak 90 degrees to the right and left.**
- f. **Move the kayak backward three to four boat lengths using appropriate and effective reverse strokes**
- g. **Paddle the kayak in a buoyed figure 8 course around markers three to four boat lengths apart.**



## Model Design and Building

Changes were made to requirements 3, 4a,4b, 4c, 4e, 5, 5a, and 5d. The changes are shown below.

3. With your counselor's advice, select a subject from requirement 4 for your model project ~~(no kits).~~ **Kits may not be used.** Prepare the necessary plans to the proper scale. ~~Make a list of materials to be used, and a list of the required tools.~~ This model should be your own original work. Tell **your counselor** why you selected this ~~subject~~ **project**.
4. a. Make an architectural model. Build a model of a house to a scale of 1/4"=1'0" **(1:50 scale)** ~~(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. **Review with your counselor the materials you used and the details of your model.**
- b. Build a structural model. Construct a model showing corner construction of a wood frame building to a scale of 1 1/2"=1'0" ~~(8:1 Metric)~~ **(1:8 scale)**. 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.
- c. 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  $3/4"=1'0"$  (*15:1 Metric*). *Talk to your counselor about how to begin this model, and present the scale and the materials you will use. (1:15 scale)*. After completion, present the model to your counselor *and be prepared to discuss any problems you had*. **Discuss the scale, the materials used, and any problems you encountered in building *this the* model.**
  - e. Make an industrial model. Build a model of an actual passenger-carrying vehicle to a scale of  $1"=1'0"$  or  $1/2"=1'0"$  (*10:1 or 25:1 Metric*) (**1:10 or 1:25 scale**). 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 *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 **or a hand-held prop** 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* **existing designs of vehicles and hand-held devices**.
    - d. *Write a short essay in which you discuss* **Discuss** your design, scale, and materials choices **with your counselor**. Describe how you engineered your model and discuss any difficulties you encountered and what you learned.
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## Painting

**Requirement 2b was deleted, and 2c and 2d renumbered as 2b & 2c, and requirements 6 and 8 were revised, as shown below.**

2.
    - b. *Explain the differences between oil-based paints, Acrylic-based paints, and water-based paints.*
      - e. Explain where you would apply enamel paint, flat paint, wood stain, and varnish, and explain the importance of sheen.
      - d. Tell why each is best for these uses.
  6. Explain the importance of ladder safety, *environmental responsibility, and personal hygiene* **personal hygiene, and the use of personal protective equipment** when painting.
  8. Find out about career opportunities in the *paint industry* **painting craft**. Discuss the training and experience required, and explain why this profession might interest you.
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## Personal Fitness

Changes were made to requirements 2, 3, 4, 5, 6, and 8. Included in the changes were deletions of old requirements 2a, 2b, 2f, 3c, 3d, 3e, 3h, and 3i, plus additions of new requirements 2a, 3d, 3e, 3g, and 6b. The changes are shown below.

2.
  - a. ~~Components of personal fitness.~~  
**Reasons for being mentally, physically, socially, and spiritually fit**
  - b. ~~Reasons for being fit in all components.~~
    - ~~e.~~ What it means to be mentally healthy.
    - ~~d.~~ What it means to be physically healthy ~~and fit.~~
    - ~~e.~~ What it means to be socially healthy. ~~Discuss your activity in the areas of healthy social fitness.~~
    - ~~f.~~ ~~What you can do to prevent social, emotional, or mental problems.~~
3.
  - a. ~~Are you free from all curable diseases?~~ Are you living in such a way that your risk of preventable diseases is minimized?
  - b. Are you immunized and vaccinated according to the advice of your health-care provider **and the direction of your parent(s)/guardian(s)?**
    - ~~c.~~ ~~Do you understand the meaning of a nutritious diet and know why it is important for you? Does your diet include foods from all food groups?~~
    - ~~d.~~ ~~Are your body weight and composition what you would like them to be, and do you know how to modify them safely through exercise, diet, and lifestyle?~~
    - ~~e.~~ ~~Do you carry out daily activities without noticeable effort? Do you have extra energy for other activities?~~
  - c. ~~f.~~ Are you free from habits relating to poor nutrition and the use of alcohol, tobacco, drugs, and other practices that could be harmful to your health?
  - d. **What are the advantages to getting a full night's sleep?**
  - e. **Define a nutritious, balanced diet and why it is important.**
  - f. ~~g.~~ Do you participate in a regular exercise program or recreational activities?
    - ~~h.~~ ~~Do you sleep well at night and wake up feeling ready to start the new day?~~
    - ~~i.~~ ~~Are you actively involved in the religious organization of your choice, and do you participate in its youth activities?~~
  - g. **What are you doing to demonstrate your duty to God?**
  - h. ~~j.~~ Do you spend quality time with your family and friends in social and recreational activities?
  - i. ~~k.~~ Do you support family activities and efforts to maintain a good home life?
4.
  - a. The ~~components~~ **areas** of physical fitness
  - b. Your weakest and strongest ~~component~~ **area** of physical fitness
  - c. The need to have a balance in ~~all five components~~ **the four areas** of physical fitness
  - d. How a program like ScoutStrong can lead to lifelong healthful habits
  - e. How the ~~components~~ **areas** of personal fitness relate to the Scout Law and Scout Oath
5. Explain the following ~~about nutrition~~:
  - a. The importance of good nutrition
  - b. What good nutrition means to you
  - c. How good nutrition is related to the other components of personal fitness
  - d. ~~The three components of a sound weight (fat) control program~~

### How to maintain a healthy weight

6. Before doing requirements 7 and 8, ~~complete the aerobic fitness, flexibility, and muscular strength tests, along with the body composition evaluation as described in the Personal Fitness merit badge pamphlet. Record your results and identify those areas where you feel you need to improve.~~ **Do the following:**
    - a. **Complete the aerobic fitness, flexibility, and muscular strength tests, as described in the Personal Fitness merit badge pamphlet. Record your results and identify those areas where you feel you need to improve.**
    - b. **Keep track of what you eat and drink for three days. Identify three healthy eating goals you want to work on.**
  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 ~~two~~ **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. ~~For the body composition evaluation, compare and analyze your preprogram and postprogram body composition measurements.~~ Discuss the meaning and benefit of your experience, and describe your long-term plans regarding your personal fitness.
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## Reading

The requirements for the merit badge were completely rewritten. The changes are as follows:

1. Do EACH of the following:
  - a. **Take a tour of a library. Discuss with your counselor how the library is organized and what resources and/or services are offered in the library.**
  - b. ~~a.~~ Learn how to search ~~your~~ **a** library's card catalog or computerized catalog by author, title, and subject.
  - c. **In a library, search the card catalog or computerized catalog for six books of four different types, such as poetry, fiction, nonfiction, and biographies.**
  - d. ~~b.~~ With the assistance of your merit badge counselor or ~~a~~ **the** librarian, ~~select six books of four different types such as poetry, drama/plays, fiction, nonfiction, biographies, etc.). Ask your librarian or counselor about award-winning books that are recommended for readers your age and include at least one of those titles.~~ **see if you can locate on the shelves the six books you selected.**
    - ~~c.~~ Find the books in the library catalog. With your counselor's or a librarian's assistance, locate the books on the shelves.
    - ~~d.~~ Read each book. Keep a log of your reading that includes the title of the book, the pages or chapters read, the date you completed them, and your thoughts about what

*you have read so far. Discuss your reading with your counselor. Using your log as a reference, explain why you chose each book and tell whether you enjoyed it and what it meant to you.*

2. **Do EACH of the following:**

- a. **Identify a book you have enjoyed. Find out what other books the author has written.**
- b. **Look at one or more "best books" lists. These can be based on year, subject, or even all time. Identify at least one book you would like to read.**

3. **Read four different types of books, such as poetry, fiction, nonfiction, or biographies. Do any ONE of the following for each book you have read:**

- a. **Write a review of the book. Include what you liked/didn't like about the book. Include if you would recommend this book, and if so, who might enjoy reading it.**
- b. **Watch a movie based on the book. What was the same between the book and movie? What was different? Which did you enjoy more? Discuss this with your merit badge counselor.**
- c. **Give a "book talk" to your class, troop, or patrol.**

4. **Read a nonfiction book or magazine that teaches you how to do something like cooking, wood-building projects, video game design, science experiments, knot-tying, etc. With your counselor's and parent's or guardian's permission, complete a project from the book. Share your experience with your merit badge counselor. Reading a merit badge pamphlet will not count toward completing this requirement.**

5. ~~2.~~ Read about the world around you from any two sources— : books, magazines, newspapers, the Internet (with your parent's **or guardian's** permission), field manuals, etc. Topics may include **Scouting**, sports, environmental problems, politics, social issues, current events, nature, religion, etc. Discuss what you have learned with your counselor.

~~3.~~ *Do ONE of the following:*

- a. *From a catalog of your choice, fill out an order form for merchandise as if you intended to place an order. Share the completed form with your counselor and discuss it.*
- b. *With your parent's permission, locate at least five websites that are helpful for your scouting or other activities. Write the Internet addresses of these sites in your log. Talk with your counselor or a librarian about safety rules for using the Internet.*

6. ~~4.~~ With your counselor's and *your* parent's **or guardian's** permission, choose ONE of the following activities and devote at least four hours of service to that activity. Discuss your participation with your counselor.

- a. Read to a sick, blind, or homebound person in a hospital or in an extended-care facility.

- b. Perform volunteer work at your school library or a public library.
  - c. Read stories to younger children, in a group or individually.
  - d. **Organize a book swap in your troop, school, or place of worship.**
  - e. **Organize a book drive to collect books. Donate them to an organization in need.**
- 



## Rifle Shooting

There were no changes to the requirements. However, it appears that in the 2020 Scouts BSA Requirements booklet, the note at the end of requirement 2-Option A was omitted by an editorial error. Furthermore, although the note refers to requirement 2l, it should refer to requirement 2m. The reference to requirement 2l inadvertently was not changed to refer to requirement 2m when the requirements were revised in 2017.

The missing note should read as follows:

\*Note: It is not always practical to adjust the sights (i.e. when using a borrowed fixed-sight rifle). For requirement **2m**, 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.

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## Safety

Changes were made to requirements 1a, 1b, 1e, 2b, and 5, requirement 1c was deleted, and requirements 1d and 1e were renumbered as 1c and 1d. The changes are as shown below.

1.
  - a. Newspaper ~~and other stories~~, **internet (with parent's or guardian's permission), or other articles**, facts, and statistics showing common types and causes of injuries in the home and in the workplace, and how these injuries could be prevented.
  - b. Newspaper ~~and other stories~~, **internet (with parent's or guardian's permission), or other articles**, facts, and statistics showing common types of crimes and ways to avoid being a crime victim.  
~~e. Facts you have obtained concerning the frequency of accidents and of crimes in your local area.~~
  - c. ~~d.~~ A paragraph or more, written by you, explaining how a serious fire, accident, or crime could change your family life.
  - d. ~~e.~~ A list of safe practices and safety devices currently used by your family, such as safety practices used ~~while driving or working and safety devices that prevent injuries or help in an emergency~~: **at home, while working, and while driving**
2.
  - b. Review ~~or~~ **and** develop your family's ~~plan of escape in case of~~ **fire prevention plan. Review your family's emergency action plan for** fire in your home. As you develop ~~the escape plan~~ **these plans** with family members, share with them facts about the common causes of fire in the home, such as smoking,

cooking, electrical appliances, and candles.

5. Make an *accident prevention* **emergency action** plan for five family activities outside the home (at your place of worship, at a theater, on a picnic, at the beach, and while traveling, for example). Each plan should include an analysis of possible hazards, proposed action to correct hazards, and reasons for the correction you propose in each plan.
- 



## Space Exploration

Changes were made to requirement 5c. The changes are shown below.

5. c. Design a robotic mission to another planet *or moon*, **moon, comet, or asteroid** that will return samples of its surface to Earth. Name the planet *or moon*, **moon, comet, or asteroid** your spacecraft will visit. Show how your design will cope with the conditions of the *planet's or moon's environment* **environments of the planet, moon, comet, or asteroid**.
- 



## Sustainability

Changes were made to requirement 2-Energy-B, and 4f, as shown below.

2. o Energy
    - B. Develop and implement a plan *that attempts* to reduce **the** consumption *for* **of** one of your family's household utilities **that consume energy, such as gas appliances, electricity, heating systems, or cooling systems**. Examine your family's bills for that utility reflecting usage for three months (past or current). As a family, choose three ways to help reduce consumption and be a better steward of this resource. Implement those ideas for one month. Share what you learn with your counselor, and tell how your plan affected your family's usage.
  4. f. **Climate change**. Find a world map that shows the pattern of temperature change for a period of at least 100 years. Share this map with your counselor, and discuss three factors that scientists believe affect the global weather and temperature. **Discuss with your counselor three impacts of climate change and how these changes could impact sustainability of food, water, or other resources.**
- 



## Traffic Safety

A new *Traffic Safety* merit badge pamphlet with revised requirements was issued in 2016, after the release of *Boy Scout Requirements 2016*. There was a minor change to requirement 4b and revisions to

requirements 5b and 5d. The text in *Boy Scout Requirements 2017 and 2018*, and in *Scouts BSA Requirements 2019* included the change to requirement 4b, but inadvertently did not include the changes to 5b and 5d. This was corrected in *Scouts BSA Requirements 2020*. The text below shows the changes to the wording of requirements 5b and 5d from the 2019 to 2020 requirements booklet.

5.
  - b. Using the Internet (with your parent's permission), visit five ~~Web sites~~ **websites** that cover safe driving for teenagers. *As* **Then in** a group, ~~discuss what you learn session~~ with ~~your counselor and~~ at least three ~~other~~ teenagers **and your counselor, discuss what you have learned.**
  - d. Accompanied by an adult and a buddy, pick a safe place to observe traffic at a controlled intersection (traffic signal or stop sign) on three separate days and at three different times of the day, for 30 minutes on each visit. At this intersection, survey ~~(1) such~~ violations **as that might occur. These violations could include (but are not limited to)** running a red light or stop sign ~~;~~ ~~or (2) seat belt usage~~ **, speeding, using a cell phone while driving, or occupants not wearing their seat belts.** Count the number of violations ~~or number of drivers not wearing a seat belt~~. Record in general terms ~~if the driver was young or old, male or female~~ **the approximate age of the people you observed.** Keep track of the total number of vehicles observed so that you can determine the percentage of compliance vs. violations. Discuss the findings with your merit badge counselor.



## Whitewater

Changes were made to requirements 1a, 1c, 2, 4, and 12. Requirement 9 was revised and split into requirements 9 and 10, with old requirement 10 renumbered as 11. Old requirement 11 was deleted. The changes are as follows:

1.
  - a. Explain to your counselor the most likely hazards you may encounter while participating in whitewater activities *and* **, activities, including branches and trees in water along a shore and stretching across the stream, rocks, hydraulics over ledges or lowhead 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.
  - c. Explain to your counselor the most likely hazards you may encounter while participating in whitewater activities *and* **, activities, including branches and trees in water along a shore and stretching across the stream, rocks, hydraulics over ledges or lowhead 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.
2.
  - a. *Explain the following river features: upstream V, downstream V, riffle, eddy, eddy line, pillow, ledge, bend, shallows, current, drop, horizon line, wave, standing wave, wave train.*

- 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.**
- b. **Describe how waves form including standing waves and wave trains.**
  - 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.**
  - d. ~~b.~~ Explain when, why, and how you should scout a river while ashore and while on the river **and when you should portage your boat.**
4.
    - a.
      1. Demonstrate the following strokes in the bow: cross forward, bow draw, cross bow draw, bow pry, ~~Duffek~~, **and** sculling draw, ~~and sculling pushaway (reverse scull)~~.
      2. Demonstrate the following strokes in the stern: stern draw, stern pry, sculling draw, ~~sculling pushaway (reverse scull)~~, and forward with stern pry.
      3. Demonstrate a high brace, low brace, and ~~a~~ righting pry.
    - b.
      1. Demonstrate the following strokes: cross forward, bow draw, cross bow draw, stern draw, pry, stern pry, ~~Duffek~~, sculling draw, ~~sculling pushaway (reverse scull)~~, and forward with stern pry.
    - c.
      1. Demonstrate the following strokes: ~~Duffek~~, bow draw, rudder, and sculling draw. <
  9. ~~Do the following:~~
    - ~~a.~~ 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.
  10. ~~b.~~ 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.
    - a. ~~1.~~ Launch and land.
    - b. ~~2.~~ Paddle forward in a straight line **at least 10 boat lengths.**
    - c. ~~3.~~ ~~Backpaddle~~ **at least five boat lengths.**
    - d. ~~4.~~ Ferry upstream **from both sides of the river.**
    - e. ~~5.~~ Ferry downstream **from both sides of the river.**
    - f. ~~6.~~ Eddy turn **from both sides of an eddy.**
    - g. ~~7.~~ Peel out **from both sides of an eddy.**
  11. ~~10.~~ Explain and demonstrate the following to your counselor:
 

~~11. Discuss the use of inflatable rafts on moving water. In your discussion, explain the special safety precautions that should be taken when using an inflatable raft and the risks of "tubing" on moving water.~~
  12. Participate in **a one or more** whitewater ~~trip~~ **trips** using either a canoe or kayak on a Class I ~~or~~ **and/or** Class II river. ~~Help to prepare a written plan, specifying the route, schedule, equipment, safety precautions, and emergency procedures. Determine local rules and obtain permission from landowners and land managers in advance. Explain what steps you have taken to comply with BSA Safety Afloat and the American Whitewater~~

*safety guidelines. Execute the plan with others.* **The trip(s) must involve at least six hours of paddling time. For each trip:**

- a. **Help to prepare a written plan, specifying the route (put-ins and takeouts), schedule, equipment, safety precautions, and emergency procedures.**
- b. **Determine local rules and obtain permission from landowners and land managers in advance.**
- c. **Explain what steps have been taken to comply with BSA Safety Afloat and the American Whitewater safety guidelines.**
- 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.**
- e. **Explain to your counselor how well your plans worked for each trip taken.**

## Special Opportunities



### Cyber Chip

Changes were made to requirement 1 for Scouts in grades 6-8 and 9-12, and to requirement 4 for Scouts in grades 6-8, and the note regarding recharging the Cyber Chip annually was revised. In addition, links to the various videos are now provided. The version of the requirements as posted on Scouting.org differs slightly from the version in the requirements booklet. The changes are as shown below:

#### Grades 6-8:

1. Read and sign the Level II Internet Safety Pledge *from NetSmartz. (BSA Cyber Chip green card)* **on the BSA Cyber Chip card. (BSA Cyber Chip green card; can be ordered at [www.scoutshop.org](http://www.scoutshop.org).)**
3. Watch the video "Friend or Fake?" ([www.nsteens.org/Videos/FriendOrFake](http://www.nsteens.org/Videos/FriendOrFake)), along with two additional videos of your choosing ([www.nsteens.org/Videos/](http://www.nsteens.org/Videos/)) **{from the list below}**, to see how friends can help each other to stay safe online. (*www.NetSmartz.org/scouting*)
  - o **Post to be Private**
  - o **Split Decisions**
  - o **Two Kinds of Stupid**
4. As an individual or with your patrol, use the EDGE method *and mini-lessons* to teach Internet safety rules, behavior, and "netiquette" to your troop or another patrol. You are encouraged to use any additional material and information you have researched. Each member of the patrol must have a role and present part of the lesson. (*www.NetSmartz.org/scouting*)

## Grades 9-12

1. Read and sign the Level II Internet Safety Pledge (~~BSA Cyber Chip green card~~) **on the BSA Cyber Chip card. (BSA Cyber Chip green card; can be ordered at [www.scoutshop.org](http://www.scoutshop.org).)**
4. Watch three **{of the following}** "Real-Life Story" videos ([www.nsteens.org/videos.aspx?Brand=Real-Life-Stories](http://www.nsteens.org/videos.aspx?Brand=Real-Life-Stories)) to learn the impact on teens. (*NetSmartz.org/scouting*)
  - [Friend or Fake](#)
  - [Post to be Private](#)
  - [Split Decisions](#)
  - [Two Kinds of Stupid](#)
5. As an individual or patrol, use the EDGE method and the Student Project Kit ([www.missingkids.org/content/dam/netsmartz/downloadable/studentprojectkit/Student Project Kit V1.5.pdf](http://www.missingkids.org/content/dam/netsmartz/downloadable/studentprojectkit/Student_Project_Kit_V1.5.pdf)) to teach Internet safety rules, behavior, and "netiquette" to your troop or another patrol. You are encouraged to use any additional material and information you have researched. Each member of the patrol must have a role and present part of the lesson. (*NetSmartz.org/scouting*)

Note: All Cyber Chips will expire annually. Each Scout will need to *"recharge" the chip by going back to the NetSmartz Recharge area. This space will hold new information, news, and a place for the Scout* **go to NetSmartz ([www.netsmartz.org](http://www.netsmartz.org)) and complete two new resources** to recommit to net safety and netiquette. Then, with the unit leader, the Scout can add the new date to the Cyber Chip card or certificate.



## Nova and Supernova Awards

Minor editorial changes were made to the description of the Nova and Supernova Awards in the requirements book, including an updated list of available Nova Awards for Scouts BSA. We have not reproduced that information in its entirety, but have incorporated much of the material on our website.



## Paul Bunyan Award

The name of the Award was changed to make it gender neutral. Changes were made to requirements 1, 6 (which was renumbered as 5), and 7. A new requirement 6 was added and old requirement 5 was deleted. The changes are shown below.

1. Explain the most likely hazards you may encounter while *participating in camping activities* **using woods tools listed in requirement 5** and what you should do to anticipate, help prevent, *mitigate* **manage**, and respond to these hazards.
5. *Earn the Firem'n Chit.*
- 6.** Be familiar with the proper and safe use, **maintenance, and storage** of woods tools including:

- a. Ax
  - b. Hatchet
  - c. Loppers
  - d. McLeod
  - e. **Pickax**
  - f. **Pry bar**
  - g. ~~e.~~ Pulaski
  - h. ~~f.~~ Saw
  - i. ~~g.~~ Shovel
6. **Demonstrate proper use of four of the tools listed in requirement 5.**
7. With *official* **unit leader** approval and supervision, using woods tools, spend at least two hours doing one of the following conservation oriented projects:
- a. Clear trails or fire lanes.
  - b. Trim a downed tree, cut into 4-foot lengths, and stack; make a brush pile with *the* branches.
  - c. Build a natural retaining wall or irrigation way to aid in a planned conservation effort.

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## Religious Emblems

Changes were made to the information for a number of the religious organizations. See the appropriate web page for more information.

[Religious Emblems for Cub Scouts and Webelos Scouts](#)

[Religious Emblems for Scouts BSA, Venturers, Sea Scouts, and Explorers](#)

[Religious Emblems for Scouters](#)



## World Conservation Award

The requirement to participate in a conservation project which was omitted in the Scouts BSA Requirements 2019 booklet was restored. The requirement which was restored, reads as follows:

**AND participate in a conservation project as part of an approved Scouting program totaling at least three hours that addresses a conservation need common to more than one country.**

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This analysis was prepared as a service to Scouts and Scouters nationwide

[Paul S. Wolf](#)

Secretary

US Scouting Service Project, Inc.

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