



Boy Scout Advancement Requirements Changes

Effective January 1, 2010

When there is a conflict between two published lists of requirements, such as *Boy Scout Requirements* (BSA Publication No. 34765) and a Merit Badge Pamphlet or the *Boy Scout Handbook*, the requirements book should be considered to be the controlling document, until a newer edition of *Boy Scout Requirements* is issued.

A new edition of *Boy Scout Requirements* (34765) was released in mid January, 2010, and new pamphlets were issued in 2009 for 9 merit badges, including the new *Scuba Diving* merit badge. The new *Boy Scout Requirements* booklet has revised requirements for all of the ranks (including a correction to one of the requirements listed in the new *Boy Scout Handbook* for one item for Eagle Scout), major revisions to 5 merit badges, minor changes to 12 merit badges, and the requirements for the new merit badge. In addition, the book now includes a specific definition of "ACTIVE" that clarifies some of the information previously published in other locations.

A new 12th edition of the *Boy Scout Handbook* (34622) was issued in the summer of 2009. That book contains new requirements for each rank listed below, which did not officially take effect until January 1, 2010. Scouts working toward ranks in 2009 could use the new requirements, or could continue to use the old requirements, at their option. If a Scout started work toward a rank before January 1, 2010, using the requirements that were current before January 1, 2010, he may complete **THAT RANK ONLY** using the old requirements. Any progress toward a rank that is begun after January 1, 2010, must use the requirements as they are presented in the *Boy Scout Handbook* (34622) or in the *2010 Boy Scout Requirements* book (34765). The fact that a Scout can work on the requirements for Tenderfoot, Second Class and First Class simultaneously does NOT mean that he is "working toward all three ranks". He can NOT use the old requirements for all three. Similarly, if a Scout has multiple merit badges, he is NOT "working toward Star, Life, and Eagle". He may only use the old requirements for the NEXT rank he completes.

Scouts starting work on any of these badges at this point must use the new requirements.

BSA issued new editions of ALL of the merit badge pamphlets on August 1, 2008. The primary change to most of the pamphlets was the introduction of color photographs and diagrams, and new covers. The actual text and requirements, in most cases did not change from the previous editions. In some cases, however, the new editions do contain new information, and new requirements. *If the copyright date in the new pamphlet is not 2008 or later, the text in the pamphlet, including the requirements, did not change, only the cover and illustrations.* In addition, two of the old pamphlets, for the *Architecture and Landscape Architecture* Merit Badges were combined into a single pamphlet, although the Merit Badges remain separate and distinct from each other. Also, one Merit Badge, *Auto Mechanics*, was renamed to *Automotive Maintenance*, (and the emblem on the badge was changed). Although a new edition of the *Lifesaving* merit badge pamphlet was issued, the requirements did not change. However, the footnote relative to alternative requirements for the Second Class and First Class rank swimming requirements was deleted.

A NEW merit badge, for **Scuba Diving**, was released and made available to Scouts as of December 1, 2009. In addition, BSA has announced that four other new merit badges will be released later in 2010. These will include *Inventing* in the first quarter, *Scouting Heritage* and *Geocaching* in the 2nd quarter, and *Robotics* in the fourth quarter. We'll add those as soon as they are released.

BSA had also announced a special program in honor of the 100th anniversary of the founding of the BSA, to include the reintroduction, for ONE YEAR ONLY, of four Historical Merit Badges - Carpentry, Pathfinding, Signaling, and Tracking. However, that program has been placed on HOLD.

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In the revisions below, where the requirements weren't completely rewritten, the wording changes are shown as follows:

New text is in bold GREEN underlined Serif text like this sentence.

~~Deleted portions are struck through RED italic text like this sentence.~~

Definition of "ACTIVE"

A Scout will be considered "active" in his unit if he is

1. Registered in his unit (registration fees are current)
2. Not dismissed from his unit for disciplinary reasons
3. Engaged by his unit leadership on a regular basis (informed of unit activities through Scoutmaster conference or personal contact, etc.
4. In communication with the unit leader on a quarterly basis.

(Units may not create their own definition of active; this is a national standard.)

If the Scout does not initiate communication, the unit leader is to contact the Scout and ask if the youth wishes to remain in Scouting. If the answer is negative, then the unit leader should no longer communicate with the Scout. If the answer is affirmative, the unit leader should provide the unit calendar. After six months of nonparticipation, the unit leader may cease to contact with the youth and drop the Scout from the unit at recharter time.

The Scout may return to the unit at any time while on the unit charter. At any time a Scout is dropped from a charter, the youth may re-apply to a unit for readmission; the acceptance of the application is at the discretion of the unit. The youth would be reinstated at the rank and level that can be documented by either the Scout or the unit.



Joining Requirement (Scout)

The wording of requirement 1 was revised in 2005 (we had not noticed the change) to clarify the age requirement. A Boy who has earned the Arrow of Light or has completed the 5th grade must ALSO be at least 10 years old before he can join a Boy Scout Troop. The revision to the wording is as follows:

1. Meet age requirements: ~~Be a boy who has completed the fifth grade and be at least 10 years old, or be 11 years old, or have earned the Arrow of Light Award and be at least 10 years old, and be under 18 years old.~~

Be a boy who is 11 years old, or one who has completed the fifth grade or earned the Arrow of Light Award and is at least 10 years old, but is not yet 18 years old.



Tenderfoot

A new requirement 4c was added and the wording of requirement 13 was revised. The revisions are as follows:

4.
 - c. Using the EDGE method teach another person how to tie the square knot.
 13. Demonstrate scout spirit by living the Scout Oath (Promise) and Scout Law in your everyday life. Discuss four specific examples of how you have lived the points of the Scout Law in your daily life.
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Second Class

New requirements 2 and 10 were added (and old requirements 2-11 renumbered as 3-9 and 11-13), and the wording of requirements 3b, 3c, 3d, 3f, 3g, 4, 9a, and 11 (old 2b, 2c, 2d, 3, 8a, and 9) were revised. The revised requirements are as follows:

1.
 - a. Demonstrate how a compass works and how to orient a map. Explain what map symbols mean.
 - b. Using a compass and a map together, take a 5-mile hike (or 10 miles by bike) approved by your adult leader and your parent or guardian.*
2. Discuss the principles of "Leave No Trace"
3. ~~2~~
 - a. Since joining, have participated in five separate troop/patrol activities (other than troop/patrol meetings), two of which included camping overnight.
 - b. On one of these campouts, select your patrol site and sleep in a tent that you pitched. Explain what factors you should consider when choosing a patrol site and where to pitch a tent.
 - c. ~~On one campout, demonstrate~~ Demonstrate proper care, sharpening, and use of the knife, saw, and ax, and describe when they should be used.
 - d. Use the tools listed in requirement ~~2e~~ 3c to prepare tinder, kindling, and fuel for a cooking fire.
 - e. Discuss when it is appropriate to use a cooking fire and a lightweight stove. Discuss the safety procedures for using both..
 - f. In an approved place and at an approved time, demonstrate ~~Demonstrate~~ how to ~~light~~ build a fire and set up a lightweight stove. Note: Lighting the fire is not required.
 - g. On one campout, plan and cook ~~over an open fire~~ one hot breakfast or lunch ~~for yourself~~, selecting foods from the food pyramid. Explain the importance of good nutrition. Tell how to transport, store, and prepare the foods you selected.
4. ~~3~~ Participate in a flag ceremony for your school, religious institution, chartered organization, community, or troop activity. Explain to your leader what respect is due the flag of the United States.
5. ~~4~~ Participate in an approved (minimum of one hour) service project.
6. ~~5~~ Identify or show evidence of at least ten kinds of wild animals (birds, mammals, reptiles, fish, mollusks) found in your community.
7. ~~6~~
 - a. Show what to do for "hurry" cases of stopped breathing, serious bleeding, and ingested poisoning.
 - b. Prepare a personal first aid kit to take with you on a hike.
 - c. Demonstrate first aid for the following:
 - 1 Object in the eye

- 2 Bite of a suspected rabid animal
 - 3 Puncture wounds from a splinter, nail, and fishhook
 - 4 Serious burns (partial thickness, or second degree)
 - 5 Heat exhaustion
 - 6 Shock
 - 7 Heatstroke, dehydration, hypothermia, and hyperventilation
8. ~~7~~
 - a. Tell what precautions must be taken for a safe swim.
 - b. Demonstrate your ability to jump feetfirst into water over your head in depth, level off and swim 25 feet on the surface, stop, turn sharply, resume swimming, then return to your starting place.
 - c. Demonstrate water rescue methods by reaching with your arm or leg, by reaching with a suitable object, and by throwing lines and objects. Explain why swimming rescues should not be attempted when a reaching or throwing rescue is possible, and explain why and how a rescue swimmer should avoid contact with the victim.
 9. ~~8~~
 - a. Participate in a school, community, or troop program on the dangers of using drugs, alcohol, and tobacco, and other practices that could be harmful to your health. Discuss your participation in the program with your family, **and explain the dangers of substance addictions.**
 - b. Explain the three R's of personal safety and protection.
 10. **Earn an amount of money agreed upon by you and your parent, then save at least 50 percent of that money.**
 11. ~~9~~ Demonstrate scout spirit by living the Scout Oath (Promise) and Scout Law in your everyday life. **Discuss four specific examples (different from those used for Tenderfoot requirement 13) of how you have lived the points of the Scout Law in your daily life.**
 12. ~~10~~ Participate in a Scoutmaster conference.
 13. ~~11~~ Complete your board of review.



First Class

Old requirements 10, 11, and 12 were renumbered as 12, 10 and 11 respectively. Requirements 7a and 7b were combined, and 7c was renumbered as 7b. The wording of requirements 2, 3, 4a, and 12 (old 10) were revised. The revised requirements are as follows:

1. Using a **map and** compass, complete an orienteering course that covers at least one mile and requires measuring the height and/or width of designated items (tree, tower, canyon, ditch, etc.)
2. Since joining, have participated in ten separate troop/patrol activities (other than troop/patrol meetings), three of which included camping overnight. **Demonstrate the principles of Leave No Trace on these outings.**
4.
 - a. Help plan a patrol menu for one campout that includes at least one breakfast, one lunch, and one dinner and that requires cooking at least two **of the** meals. Tell how the menu includes the foods from the food pyramid and meets nutritional needs.
7.
 - a. Discuss when you should and should not use lashings. **Then demonstrate tying the timber hitch and clove hitch and their use in square, shear, and diagonal lashings by joining two or more poles or staves together.**
~~b. Demonstrate tying the timber hitch and clove hitch and their use in square, shear, and diagonal lashings by joining two or more poles or staves together.~~
 - b. ~~e~~ Use lashing to make a useful camp gadget.
10. ~~11~~ **Demonstrate scout spirit by living the Scout Oath (Promise) and Scout Law in your everyday life.**
~~11~~ Tell someone who is eligible to join Boy Scouts, or an inactive Boy Scout, about your troop's activities. Invite him to a troop outing, activity, service project or meeting. Tell him how to join, or encourage the inactive Boy Scout to become active.

11. ~~12~~. Describe the three things you should avoid doing related to use of the Internet. Describe a cyberbully and how you should respond to one.
12. Demonstrate scout spirit by living the Scout Oath (Promise) and Scout Law in your everyday life. Discuss four specific examples (different from those used for Tenderfoot requirement 13 and Second Class requirement 11) of how you have lived the points of the Scout Law in your daily life.



Star

The lists of positions of responsibility for requirement 5 were revised by adding some positions. The revised lists are as follows:

Boy Scout troop.

- Patrol leader,
- assistant senior patrol leader,
- senior patrol leader,
- Venture patrol leader
- troop guide,
- Order of the Arrow troop representative,
- den chief,
- scribe,
- librarian,
- historian,
- quartermaster,
- bugler,
- junior assistant Scoutmaster,
- chaplain aide, ~~or~~
- instructor, ~~or~~
- troop Webmaster, or
- Leave No Trace trainer.

Varsity Scout team.

- Captain,
- cocaptain,
- program manager,
- squad leader,
- team secretary,
- Order of the Arrow team representative,
- librarian,
- historian,
- quartermaster,
- chaplain aide,
- instructor, ~~or~~
- den chief, ~~or~~
- team Webmaster, or
- Leave No Trace trainer.

Venturing crew / Sea Scout ship.

- President,
- vice president,
- secretary,
- treasurer,
- den chief,
- quartermaster,
- historian,
- guide,
- boatswain,
- boatswain's mate,
- yeoman,
- purser, ~~or~~
- storekeeper, ~~or~~
- crew/ship Webmaster, or
- Leave No Trace trainer.



Life

A new requirement 6 was added and old requirements 6 and 7 were renumbered as 7 and 8. In addition, the lists of positions of responsibility for requirement 5 were revised by adding some positions (see the list above). The revisions are as follows:

6. While a Star Scout, use the EDGE method to teach a younger Scout the skills from ONE of the following six choices, so that he is prepared to pass those requirements to his unit leader's satisfaction.
- a. Second Class - 7a and 7c (first aid)
 - b. Second Class - 1a (outdoor skills)
 - c. Second Class - 3c, 3d, 3e, and 3f (cooking/camping)
 - d. First Class - 8a, 8b, 8c, and 8d (first aid)
 - e. First Class - 1, 7a, and 7c (outdoor skills)
 - f. First Class - 4a, 4b, and 4d (cooking/camping)
7. ~~6~~. Take part in a Scoutmaster conference
8. ~~7~~. Complete your board of review.



Eagle

The wording of requirements 1, 2, and 5 were revised slightly, and the lists of positions of responsibility for requirement 4 were revised by adding some positions. The revised lists are as follows:

1. Be active in your troop, team, crew, or ship and patrol for a period of at least 6 months ~~as a~~ after you have achieved the rank of Life Scout.
2. Demonstrate Scout spirit by living that you live by the principles of the Scout Oath (Promise) and Scout Law in your ~~everyday~~ daily life. List the names of individuals who know you personally and would be willing to provide a recommendation on your behalf, including parents/guardians, religious, educational, and employer references.
4. While a Life Scout, serve actively for a period of 6 months in one or more of the following positions of responsibility:

Boy Scout troop.

- Patrol leader,
- Venture patrol leader,
- assistant senior patrol leader,
- senior patrol leader,
- Venture patrol leader,
- troop guide,
- Order of the Arrow troop representative,
- den chief,
- scribe,
- librarian,
- historian,
- quartermaster,
- junior assistant Scoutmaster,
- chaplain aide, ~~or~~
- instructor, ~~or~~
- Webmaster, or
- Leave No Trace trainer

Varsity Scout team.

- Captain,
- cocaptain,
- program manager,
- squad leader,
- team secretary,
- Order of the Arrow team representative,
- librarian,
- historian
- quartermaster,
- chaplain aide,
- instructor, ~~or~~
- den chief, ~~or~~
- Webmaster, or
- Leave No Trace trainer

Venturing crew / Sea Scout ship.

- President,
- vice president,
- secretary,
- treasurer,
- den chief,
- quartermaster
- historian
- den chief,
- guide
- boatswain,
- boatswain's mate,
- yeoman,
- purser, ~~or~~
- storekeeper ~~or~~
- Webmaster, or
- Leave No Trace trainer

5. While a Life Scout, plan, develop, and give leadership to others in a service project helpful to any religious institution, any school, or your community. (The project should benefit an organization other than Boy Scouting.) The project ~~idea~~ plan must be approved by the organization benefiting from the effort, your Scoutmaster and troop committee and the council or district before you start. You must use the Eagle Scout Leadership Service Project Workbook, No. 512-927, in meeting this requirement.



Eagle Palm

The wording of requirement 1 was revised slightly, and a footnote to that requirement was added, clarifying the tenure requirement. The revised requirement, and footnote are as follows:

1. Be active in your troop and patrol for at least 3 months after becoming an Eagle Scout or after the award of your last Palm.*

* Eagle Palms must be earned in sequence, and the three-month tenure requirement must be observed for each Palm.



Scuba Diving

This is a NEW Merit Badge, which became available on December 1, 2009.

All scuba instruction must be conducted by recreational diving instructors in good standing with a scuba agency recognized by the Boy Scouts of America and approved by the BSA local council.

The requirements are as follows:

1. Do the following:
 1. Show that you know first aid for injuries or illnesses that could occur while scuba diving, including hypothermia, hyperventilation, squeezes, decompression illness, nitrogen narcosis, motion sickness, fatigue, overexertion, heat reactions, dehydration, injuries by aquatic life, and cuts and scrapes.

2. Identify the conditions that must exist before performing CPR on a person, and explain how to recognize such conditions. Demonstrate the proper technique for performing CPR using a training device approved by your counselor.
2. Before completing requirements 3 through 6, earn the Swimming merit badge.
3. Discuss the Scuba Diver's Code with your merit badge counselor, and explain the importance of each guideline to a scuba diver's safety.
4. Earn an Open Water Diver Certification from a scuba organization recognized by the Boy Scouts of America scuba policy.
5. Explain what an ecosystem is, and describe four aquatic ecosystems a diver might experience.
6. Find out about three career opportunities in the scuba industry. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

Notes for Requirement 4:

Agencies recognized by the BSA for scuba training are **PADI** (Professional Association of Diving Instructors); **NAUI** (National Association of Underwater Instructors); **SSI** (Scuba Schools International); **IDEA** (International Diving Educators Association); **PDIC** (Professional Diving Instructors Corporation); and **SDI** (Scuba Diving International). In addition to the agencies listed by name, any current member of the World Recreational Scuba Training Council (**WRSTC**) is also recognized.

Unlike many other merit badges, the Scuba Diving critical prerequisites, knowledge, and skills are not itemized in the requirements nor adequately covered in the merit badge pamphlet. The requirement to earn Open Water Diver Certification means the Scout must meet training requirements set by outside agencies and must supplement the material in the merit badge pamphlet with an entry-level scuba diver manual.

Scuba industry standards for Open Water Diver Certification require the student to be at least 15 years of age. Students under the minimum age who meet open water scuba performance requirements may qualify for a special certification that allows them to dive with an adult buddy who has, as a minimum, an open water scuba certification. Several of the scuba organizations recognized by the BSA offer "junior" open water certifications for those as young as 10; others have a minimum age of 12. Such junior open water diver certifications satisfy Scuba Diving merit badge requirement 4.



Architecture

The requirements were completely rewritten. The new requirements are as follows (with the changes highlighted):

1.
 - a. Tour your community and list the different building types you see. Try to identify buildings that can be associated with a specific period of history or style of architecture. Make a sketch of the building you most admire.
 - b. Select an architectural achievement that has had a major impact on society. Using resources such as the Internet (with your parent's permission), books, and magazines, find out how this achievement has influenced the world today. Tell your counselor what you learned.
2. ~~Arrange to meet with an architect. Ask to see the architect's office and to talk about the following:~~
 - ~~a. Careers in architecture~~
 - ~~b. Educational requirements~~
 - ~~c. Tools an architect uses~~
 - ~~d. Processes involved in a building project.~~

In the Outdoor Code, a Scout pledges to "be conservation-minded." Discuss the following with your counselor:

- a. The term sustainable architecture. Identify three features typical of green buildings.
- b. The difference between renewable building materials and recycled building materials, and how each can be used in construction.
- c. The relationship of architecture with its surrounding environment and the community.
- d. How entire buildings can be reused rather than torn down when they no longer serve their original purpose.

3. ~~Arrange to visit a construction project with the project's architect. Ask to see the construction drawings so that you can compare how the project is drawn on paper to how it is actually built. Notice the different building materials. Find out how they are used, why they were selected, and what determines how they are being put together.~~
~~Note: This requirement necessitates advance planning and permission from your parents, your counselor, and the manager of the construction site. While on site, you must closely follow the safety procedures of the construction site, including wearing a hard hat.~~
Do ONE of the following:
 - a. With your parent's and counselor's permission and approval, arrange to meet with an architect. Ask to see the scale model of a building and the drawings that a builder would use to construct this building. Discuss why the different building materials were selected. Look at the details in the drawings and the scale model to see how the materials and components are attached to each other during construction.
 - b. With your parent's and counselor's permission and approval, arrange to meet with an architect at a construction site. Ask the architect to bring drawings that the builder uses to construct the building. While at the site, discuss why the different building materials being used were selected. Discuss how the different building materials and components are attached to each other during construction.
Note: To visit a construction site will require advance planning. You will need permission from your parents, counselor, the architect, and the construction site manager. A construction site is a very dangerous place. While there, you will need to closely follow the site manager's directions and comply with all the safety procedures, including wearing a hard hat protective eyewear, and proper footwear.
 - c. Interview someone who might be your client (such as a prospective homeowner or business owner) if you were an architect. Find out what your client's requirements would be for designing a new home or business building. Write a short program including a list of requirements for the project, the functions of the building and site, how the functions relate to one another, and the goals of the project.
4. ~~Interview the owner or occupant of a home or other building (your "Client"). Find out what your client's requirements would be for designing a new home or business facility. Write down all of your client's requirements that you think would affect layout or design of the new facility.~~
Measure a room such as one where you live or where your troop meets. Make an accurately scaled drawing of the room's floor plan showing walls, doors, closets, windows, and any built-in furniture or cabinets. Neatly label your drawing with the following: your name, the date, what room you drew, and the scale of the drawing. (Drawing scale: 1/4 inch = 1 foot)
5. ~~Measure your bedroom. Make an accurately scaled drawing of the floor plan indicating walls, doors, windows, and furniture. Neatly label your drawing, including your name and the date. (Drawing scale: 1/4 inch = 1 foot)~~
Find out about three career opportunities in architecture. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.



Athletics

Requirement 2b was revised, and reads as follows:

2.
 - b. The importance of maintaining good health habits, especially during training - and how the use of tobacco products, alcohol, and other harmful substances can negatively affect your health and performance in athletic activities.



Coin Collecting

Requirement 3 was revised very slightly, and reads as follows:

3. Explain the grading terms Uncirculated, Extremely Fine, Very Fine, Fine, Very Good, Good, and Poor. Show five different grade examples of the same coin type. Explain the term "~~proof~~" proof and why it is not a grade. Tell what encapsulated coins are.



Communications

A new pamphlet with revised requirements has been released. Changes were made to requirements 1a, 1c, 1d, 7b, 8, and 9. The changes are as follows:

1.
 - a. For one day, keep a log in which you describe your communication activities. Keep track of the time and different ways you spend communicating, such as talking person-to-person, listening to ~~your~~ teachers or the radio, watching television, reading books and other print media, and ~~communicating online~~ using any electronic communication device. Discuss with your counselor what your log reveals about the importance of communication in your life. Think of ways to improve your communications skills.
 - c. In a small-group setting, meet with other scouts or with friends. Have them share personal stories about significant events in their lives that affected them in some way. Take note of how each scout participates in the group discussion and how ~~effective each one is in telling~~ effectively he communicates his story. Report what you have learned to your counselor about the differences you observed in effective communication.
 - d. List as many ways as you can think of to communicate with others (face-to-face, by telephone, letter, e-mail, ~~fax~~ text messages, and so on). For each type of communication discuss with your counselor an instance when that method might not be appropriate or effective.
 7.
 - b. Create a web page ~~for your scout troop, school, or other organization~~ or blog of special interest to you (for instance, your troop or crew, a hobby, or a sport). Include at least ~~one article~~ three articles or entries and one photograph or illustration, and one link to some other Web page or blog that would be helpful to someone who visits the Web page or blog you have created. *It is not necessary to post your web page or blog to the internet, but if you decide to do so, you must first share it with your parents and counselor and get their permission.*
 9. Plan a troop court of honor, ~~or~~ campfire program, or an interfaith worship service. Have the patrol leaders' council approve it, then write the script and prepare the program. Serve as master of ceremonies.
 10. ~~Learn about~~ Find out about three career opportunities in ~~the field of~~ communication. ~~Choose one career in which you are interested and discuss with your counselor the major responsibilities of that position and the qualifications, education, and preparation it requires.~~ Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.
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Computers

A new pamphlet with revised requirements has been released.

The requirements were substantially rewritten. The revised requirements are as follows:

1. Discuss with your counselor the tips for online safety.
2. Give a short history of the computer. Explain how the invention of the computer has affected society, science, and technology. ~~In your explanation, give a short history of the computer.~~
3. Do the following:
 - a. ~~Explain~~ Describe four ~~different~~ uses of computers outside the home.
 - b. Describe three ways you and your family could use a personal computer other than for games and ~~recreation~~ entertainment.
4. Explain ~~to your counselor~~ the following to your counselor:
 - a. The five major parts of a computer system.
 - b. How ~~the types of files used to store~~ text, sound, pictures, and video files are stored in a computer's memory
 - c. How file compression works and how compression affects the quality of the file.
 - d. Describe two computer chip-based devices, and describe how they are "smarter" because of the chip and its program.

5. Do the following:
- Explain what a program **or software application** is and how it is developed.
 - ~~Give~~ **Name** three examples of programming languages, and describe their uses.
 - Name four software packages you or your family could use, and explain how you would use them.
 - Discuss ways you can help protect a computer from viruses and how to ~~keep secure~~ **protect the** information ~~that has been saved~~ **stored** on a computer.
 - Describe how computers are linked to ~~form~~ **generate and access** the Internet and the World Wide Web.
6. Do THREE of the following:
- ~~Use a database manager to create a troop roster that includes the name, rank, patrol, and telephone number of each Scout. Show your counselor that you can sort the register by each of the following categories: rank, patrol, and alphabetically by name.~~
~~b. Use~~ **Using** a spreadsheet program, to develop a food budget for a patrol weekend campout.
 - ~~e. Use~~ **Using** a word processor, to write a letter to the parents of your troop's Scouts inviting them to a court of honor. Use the program's mail merge feature to make a personalized copy of the letter for each family.
 - Using a computer graphics program, design and draw a campsite plan for your troop.**
 - ~~Use~~ **Using** a computer graphics program, ~~create to design and draw a campsite plan for your troop. OR design a flyer flier~~ for an upcoming troop event, **incorporating both text and some type of visual such as a photograph or illustration.**
 - ~~Using a software package of your choice, develop a short presentation about a topic that has been approved by your counselor. For your presentation create at least 10 slides.~~
~~f. Using an Internet search engine (with your parent's permission), find ideas about how to conduct a troop court of honor or campfire program. Print out a copy of the ideas from at least three different Web sites. Share what you found with your counselor, and explain how you used the search engine to find this information.~~
 - Using a presentation software program of your choice, develop a report about a topic that has been approved by your counselor. For your presentation, create at least 10 slides.**
 - Using a digital camera, take a picture of a troop activity. Transfer the picture file to a computer and use photographic software to make it small enough to send easily as an e-mail attachment. Then, using a computer connected to the Internet (with your parent's permission), send an e-mail to someone you know. In your message, include the photograph as an attachment. Verify that the person received your e-mail and was able to view the attachment.
 - ~~Describe two computer chip based devices, and explain how they are "smarter" because of the chip and its program.~~
Using a database manager, create a troop roster that includes the name, rank, patrol, and telephone number of each Scout. Show your counselor that you can sort the register by each of the following categories: rank, patrol, and alphabetically by name.
7. Do ONE of the following:
- ~~Visit a business or an industrial plant that uses computers. Observe what tasks the computers accomplish, and be prepared to discuss what you have learned.~~
Using a database program of your choice, create a troop roster that includes the name, rank, patrol, and telephone number of each Scout. Create a form within the database manager to access each Scout's information individually. Show your counselor how the form works.
 - Using a software package of your choice for computer aided design (CAD), create an engineering-style drawing of a simple object. Include the top, bottom, and at least one side view and the dimensions.
 - ~~Use a general purpose programming language to write a simple program application of your choice, subject to approval by your counselor.~~
Create a blog and use it as an online journal of your Scouting activities, including group discussions and meetings, campouts, and other events. Your blog should have at least five entries and two photographs or illustrations. You need not post the blog to the Internet, but you will need to share it with your counselor. If you decide to go live with your blog, you must first share it with your parents AND counselor and get their approval.
 - ~~Design~~ **Create** a Web page for your troop, patrol, school, or place of worship. **Include at least three articles and two photographs or illustrations. Your Web page should have at least one link to a Web site that would be of interest to your audience.** You need not post the page to ~~a Web site~~ **the Internet**. However, if you

decide to do so, you ~~will first need to get your parent's permission and your counselor's approval, as well as permission from the host site~~ must first share it with your parents AND counselor and get their approval.

- e. Visit a business or an industrial plant that uses computers. Observe what tasks the computers accomplish, and be prepared to discuss what you have learned.
8. ~~For each of the following categories, discuss several related terms: input and output devices, storage media, memory, processors and coprocessors, modems or network cards, networks, World Wide Web and Internet, electronic mail, Wi-Fi.~~
9. Explain the following to your counselor:
 - a. ~~Why it is not permissible to accept a free copy of a copyrighted computer game or program from a friend~~
Why copyright laws exist
 - b. ~~The restrictions and limitations of downloading music from the Internet~~
Why it is not permissible to accept a paid, copyrighted computer game or program from a friend unless the game or program is considered freeware or shareware. Explain the concepts of freeware and shareware.
 - c. ~~Why copyright laws exist~~
The restrictions and limitations of downloading music from the Internet.
9. ~~10. Pick two~~ Find out about three career opportunities in the computer industry, field that interest you. Find out what Pick one and find out the education, training, and experience ~~those positions require~~ required for this profession. Discuss this with your counselor, and explain why this profession might interest you. Report what you learn to your counselor.



Dentistry

A new requirement 2d was added, which reads as follows:

2.
 - d. Discuss how the use of tobacco products can negatively affect your oral health



Family Life

Requirement 6(b)1 was revised as shown below..

6.
 - b.
 1. Avoiding substance abuse, including tobacco, alcohol, and drugs, all of which negatively affect your health and well-being.



Fire Safety

Requirement 3 was revised as shown below:

3. Name the most frequent causes of fire in the home and give examples of ways ~~# they~~ they can be prevented. Include a discussion about fires caused by smoking in the home, cooking, candles, fireplaces, and electrical appliances.



Fishing

A new pamphlet with revised requirements has been released.

The requirements were substantially rewritten. The revised requirements are as follows:

- 1- ~~**Do the following:** Explain to your counselor the injuries that could occur while fishing and the proper treatment, including cuts, scratches, puncture wounds, insect bites, hypothermia, dehydration, and heat reactions. Explain how to remove a hook that has lodged in your arm. Name and explain five safety practices you should always follow while fishing.~~
 - a. **Discuss the prevention of and treatment for the following health concerns that could occur while fishing, including cuts, scratches, puncture wounds, insect bites, hypothermia, dehydration, heat exhaustion, heatstroke, and sunburn.**
 - b. **Explain how to remove a hook that has lodged in your arm.**
 - c. **Name and explain five safety practices you should always follow while fishing.**
2. ~~Learn and explain~~ **Discuss** the differences between two types of fishing outfits. Point out and identify the parts of several types of rods and reels. Explain how and when each would be used. Review with your counselor how to care for this equipment.
3. Demonstrate the proper use of two different types of fishing equipment.
4. Demonstrate how to tie the following knots: clinch, Palomar, turle, blood loop (barrel knot), and **double** surgeon's loop. Explain how **and when** each knot is used ~~and when to use it.~~
5. Name and identify five basic artificial lures and five natural baits and explain how to fish with them. Explain why bait fish are not to be released.
6. ~~**Do the following:** Explain the importance of practicing Leave No Trace and how it positively affects fishing resources.~~
 - a. **Explain the importance of practicing Leave No Trace techniques. Discuss the positive effects of Leave No Trace on fishing resources.**
 - b. **Discuss the meaning and importance of catch and release. Describe how to properly release a fish safely to the water.**
7. ~~Give~~ **Obtain and review a copy** of the regulations affecting game fishing where you live. Explain why they were adopted and what you accomplish by following ~~those regulations~~ **them**.
8. Explain what good outdoor sportsmanlike behavior is and how it relates to ~~fishermen~~ **anglers**. Tell how the Outdoor Code of the Boy Scouts of America relates to a fishing sports enthusiast, including the aspects of littering, trespassing, courteous behavior, and obeying fishing regulations.
9. ~~Catch two different kinds of fish and identify them. Release at least one of them unharmed. Clean and cook another fish.~~ **Catch at least one fish. If regulations and health concerns permit, clean and cook a fish you have caught. Otherwise, acquire a fish and cook it.**



Fly Fishing

A new pamphlet with revised requirements has been released.

The requirements were substantially rewritten. The revised requirements are as follows:

1. ~~**Do the following:** Explain to your counselor the injuries that could occur while fly fishing and the proper treatment, including cuts, scratches, puncture wounds, insect bites, hypothermia, dehydration, and heat reactions. Explain how to remove a hook that has lodged in your arm. Name and explain five safety practices you should always follow while fly fishing.~~
 - a. **Discuss the prevention of and treatment for the following health concerns that could occur while fly-fishing, including cuts, scratches, puncture wounds, insect bites, hypothermia, dehydration, heat exhaustion, heatstroke, and sunburn.**
 - b. **Explain how to remove a hook that has lodged in your arm.**
 - c. **Name and explain five safety practices you should always follow while fly-fishing.**
2. ~~Discuss~~ **Demonstrate** how to match a fly rod, line and leader to ~~get~~ **achieve** a balanced system. Discuss several types of fly lines, and explain how and when each would be used. Review with your counselor how to care for this equipment.
3. Demonstrate how to tie proper knots to prepare a fly rod for fishing:
 - a. Tie a backing to a fly reel spool using the arbor ~~backing~~ knot
 - b. Attach backing to fly line using the nail knot

- c. Attach a leader to fly line using the needle knot, nail knot or a loop-to-loop connection
- d. Add a tippet to a leader using a *double surgeon's loop* **loop-to-loop connection** or blood knot
- e. Tie a fly onto the terminal end of the leader using the improved clinch knot
- d. Explain how **and when** each of the following types of flies **is are** used: dry flies, wet flies, nymphs, streamers, bass bugs, ~~and~~ poppers, **and saltwater flies. Tell what each one imitates. What does each imitate?** Tie at least two types of the flies mentioned in this requirement.
- e. Demonstrate the ability to cast a fly **30 feet** consistently and accurately using **both** overhead and roll cast techniques.
- f. Go to a suitable fishing location and make *observations on the types of insects* **observe what** fish may be eating **both above and beneath the water's surface**. Look for flying insects and some that may be on or beneath the water's surface. ~~Look under rocks.~~ Explain the importance of matching the hatch.
- g. **Do the following:** ~~Explain the importance of practicing Leave No Trace and how it positively affects fishing resources.~~
 - a. **Explain the importance of practicing Leave No Trace techniques. Discuss the positive effects of Leave No Trace on fishing resources.**
 - b. **Discuss the meaning and importance of catch and release. Describe how to properly release a fish safely to the water.**

Obtain **and review** a copy of the regulations affecting game fishing where you live **or where you plan to fish**. Explain why they were adopted and what ~~you accomplish~~ **is accomplished** by following them.

Explain **Discuss** what good outdoor sportsmanlike behavior is and how it relates to ~~fishermen~~ **anglers**. Tell how the Outdoor Code of the Boy Scouts of America relates to a fishing enthusiast, including the aspects of littering, trespassing, courteous behavior, and obeying fishing regulations.

Using the fly fishing techniques you have learned, catch two different kinds of fish and identify them. Release at least one of them unharmed. Clean and cook another fish.

Catch at least one fish. If regulations and health concerns permit, clean and cook a fish you have caught. Otherwise, acquire a fish and cook it.



Geology

Requirements 3, 4(b), 5(b)(5)(a), 5(d)(2), and 5(d)(4) were revised and new requirements 5(d)(5)(c) and 5(d)(5)d) were added. The revisions are shown below:

- 3. Review a geologic map of your area ~~with~~ **or an area selected by** your counselor, and discuss the different rock types and estimated ages of rocks represented. Determine whether the rocks are horizontal, folded, or faulted, and explain how you arrived at your conclusion.
- 4.
 - b. *Learn about the* **Find out about three** career opportunities available in geology. Pick one *that interests you and explain how to prepare for such a career. Discuss what courses might be useful for such a career. You may use resources found on the Internet (with your parent's permission), at the library, in books and articles from periodicals, from television programs, and at school.* **and find out the education, training, and experience required for the profession. Discuss this with your counselor, and explain why this profession might interest you.**
- 5.
 - b.
 - 5.
 - a. Make a *tabletop* display **or presentation** showing how oil and gas or coal is found, extracted, and processed. You may use maps, books, articles from periodicals, and research found on the Internet (with your parent's permission). Share the display with your counselor or a small group (such as your class at school) in a five minute presentation.
 - d.
 - 2. Explain to your counselor the processes of burial and fossilization, and discuss the concept of extinction. *Identify three plants or animals on the threatened or endangered list of the U.S. Fish and Wildlife Service.*

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.
5.
 - c. **Visit a rock outcrop that contains fossils. Determine what kind of rock contains the fossils, and tell your counselor the kinds of fossil evidence you found at the outcrop.**
 - d. **Prepare a display or presentation on your state fossil. Include an image of the fossil, the age of the fossil, and its classification. You may use maps, books, articles from periodicals, and research found on the Internet (with your parent's permission). Share the display with your counselor or a small group (such as your class at school). If your state does not have a state fossil, you may select a state fossil from a neighboring state.**



Graphic Arts

The 2010 *Boy Scout Requirements* book (34765) lists changes to requirements 1, 3, 4b, 4c, 6, and 7. Of those, only the change to requirement 4c is new. The other changes were in the 2006 and 2008 editions of the *Graphic Arts* merit badge pamphlets (33374B and 35906), but were omitted from *Boy Scout Requirements* (33215 and 33216) in 2007, 2008, and 2009. The requirements listed above (including those which should have been made in 2007, are shown below, but only 4c is shown with the revisions to the text highlighted.

1. Review with your counselor the processes for producing printed communications: offset lithography, screen printing, electronic/digital, relief, and gravure. Collect samples of three products, each one produced using a different printing process, or draw diagrams to help with your description.
3. Design a printed piece (flier, T-shirt, program, form, etc.) and produce it. Explain your decisions for the typeface or typefaces you use and the way you arrange the elements in your design. Explain which printing process is best suited for printing your design. If desktop publishing is available, identify what hardware and software would be appropriate for outputting your design.
4.
 - c. **Electronic/digital printing**
~~Using both text and graphics, create~~ **Create** a layout in electronic form, download it to the press or printer, and run 50 copies. **If no electronic interface to the press or printer is available, you may print and scan a paper copy of the layout.**
6. Do ONE of the following, then describe the highlights of your visit:
 - a. Visit a newspaper printing plant: Follow a story from the editor to the press.
 - b. Visit a retail, commercial, or in-plant printing facility: Follow a project from beginning to end.
 - c. Visit a school's graphic arts program: Find out what courses are available and what the prerequisites are.
 - d. Visit three Web sites (with your parent's permission) that belong to graphic arts professional organizations and/or printing-related companies (suppliers, manufacturers, printers): With permission from your parent or counselor, print out or download product or service information from two of the sites.
7. Find out about three career opportunities in graphic arts. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.



Home Repair

A new pamphlet with revised requirements has been released.

Changes were made to requirements 2a, 2b, and 3f, and a note was added. The changes are shown below.

1.
 - a. Maintain or recondition a ~~garden~~ **yard** tool and show that you know how to clean up and properly store ~~it and other tools~~ **this equipment**.

- b. ~~Install insulation in an attic, wall, or crawl space.~~
Weather strip a window or door.

3.

- f. Repair a loose step or railing.

Either a parent or the merit badge counselor may supervise the Scout's work on any Home Repairs requirements.



Landscape Architecture

Requirements 1 and 2 were dropped, 3-6 were renumbered as 1-4, and new requirement 5 added. Requirement 2 (old no. 4) was rewritten, and requirement 4a (old 6a) was revised. The changes are as follows.

- ~~1. Explain the differences between a landscape architect and a horticulturist, a landscape contractor, an architect, an urban planner, and a civil engineer. Give an example of the work each might do that is unique to that vocation. How might people in these positions work with a landscape architect?~~

~~2. Do ONE of the following:~~

- ~~1. Visit a landscape architect's office or invite a landscape architect to your troop meeting to tell about his or her work. Find out about and discuss the following with your merit badge counselor:~~

- ~~a. What a landscape architect's daily work is like.~~
~~b. The education one must have to be a professional landscape architect.~~
~~c. The methods used in developing a design.~~
~~d. The drawing tools and computer equipment used in design.~~

- ~~2. Log on to the American Society of Landscape Architects' Web site at <http://www.ASLA.org> and find out more about the landscape architecture profession and schools that educate landscape architects. Using documents printed from this Web site, report to your counselor what you have learned.~~

~~3. Go to a completed landscape project that a landscape architect has designed. Before you visit the site, obtain a plan of the design from the landscape architect if one is available.~~

- ~~4. Make a report in the form of a short talk to your Scout troop on what you found in requirement 3. Discuss the following:~~

After completing requirement 1, discuss the following with your merit badge counselor:

1. Tell whether the design had separate spaces, a clear path system, and sun and shade variety.
2. ~~Tell about the places to sit, eat, or park a car.~~
Discuss how the designated seating, eating, or parking area suited the overall design.
3. ~~Tell whether you were always comfortable and protected.~~
Explain how the design reflected consideration for the comfort, shelter, and security of the users.
4. ~~Tell about some of the trees, shrubs, and ground covers used in the design.~~
Discuss how the choice of trees, shrubs, and ground covers used in the project contributed to its appeal and function.

3. ~~5. Identify five shrubs, five trees, and one ground cover, being sure that you select examples of different shapes, sizes, and textures. With the help of your counselor or a local nursery, choose plants that will grow in your area. Bring pictures of the different planting materials or, if possible, examples of their branches, leaves, or flowers to a troop meeting. Be prepared to tell how you might use each in the design of a landscape.~~

4. 6. Look at and study a place of worship or school grounds to find the place where most people arrive by bus or car. Show you can do the following:

1. Using a measuring tape, measure and draw the entry and its nearby area using a scale of 1/8 inch equal to 1 foot on an 11-by-17-inch piece of paper. Be sure to include the driveway and the wall and door where people enter the school or place of worship. Indicate any sidewalks, structures, trees, and plants within the study area. Make a copy of this plan to save the original. ~~Do the next two items on copies.~~ then do 4b and 4c using the copies.
2. On one copy, use directional arrows to indicate where the water drains across the site, where ditches occur, and where water stands for a longer period of time.

3. Decide how you can make the place safer and more comfortable for those using it. Redesign the area on another copy of the plan. You may want to include new walks, covered waiting areas, benches, space-defining plantings of trees and shrubs, and drainage structures.

5. Find out about three career opportunities in landscape architecture. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.



Medicine

A new pamphlet with revised requirements has been released. Requirements 1j-1r, 4a, and 6a3, 6a7 and 6a13 were revised as shown below.

1.
 - a. ~~Wilhelm Conrad Roentgen~~ Daniel Hale Williams
 - j. ~~Marie and Pierre Curie~~ Wilhelm Conrad Roentgen
 - k. ~~Walter Reed~~ Marie and Pierre Curie
 - l. ~~Karl Landsteiner~~ Walter Reed
 - m. ~~Alexander Fleming~~ Karl Landsteiner
 - n. ~~Jonas Salk~~ Alexander Fleming
 - o. ~~James Watson and Francis Crick~~ Charles Richard Drew
 - p. Jonas Salk
 - q. James Watson and Francis Crick
4.
 - . Describe the roles the following people play in the delivery of health care in your state. (Note: Not all may exist in your state.)
 1. Allopathic Physician
 2. Chiropractor
 3. ~~Optometrist~~ Emergency medical technician
 4. ~~Podiatrist~~ Licensed practical/vocational nurse
 5. ~~Pharmacist~~ Medical assistant
 6. ~~Psychologist~~ Medical laboratory technologist
 7. ~~Physician's assistant~~ Nurse-midwife
 8. Nurse practitioner
 9. ~~Nurse-midwife~~ Occupational therapist
 10. ~~Registered Nurse~~ Optometrist
 11. ~~Licensed vocational/practical nurse~~ Osteopathic physician
 12. ~~Medical assistant~~ Pharmacist
 13. ~~Emergency medical technician~~ Physical therapist
 14. ~~Medical laboratory technologist~~ Physician's assistant
 15. ~~Radiologic technologist~~ Podiatrist
 16. ~~Physical therapist~~ Psychologist
 17. ~~Occupational therapist~~ Radiologic technologist
 18. ~~Respiratory therapist~~ Registered Nurse
 19. Respiratory therapist
- 6.

3. ~~Cardiovascular disease~~ Cardiology
 7. Endocrinology ~~and metabolism~~
 13. ~~Neurological~~ Neuro surgery
-



Oceanography

A new pamphlet has been released. The requirements did NOT change.



Personal Fitness

Requirement 1a2 was revised as shown below.

1.
 - a.
 2. Why preventative habits (such as exercising regularly) are important in maintaining good health, and how the use of tobacco products, alcohol, and other harmful substances can negatively affect our personal fitness.
-



Safety

Requirements 1 (introduction only), 2b, and 3b were revised as shown below.

1. Explain what safety is and what it means to be safe. Then prepare ~~Prepare~~ a notebook to include:
 2. Review or develop your family's plan of escape in case of fire in your home. As you develop the escape plan with family members, share with them facts about the common causes of fire in the home, such as smoking, cooking, electrical appliances, and candles.
 3.
 2. Show your family members how to protect themselves and your home from accidents, fire, burglary, robbery, and assault.
-

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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