CYCLING

"Enhancing our youths’ competitive edge through merit badges"
Requirements

1. Do the following:
   a. Explain to your counselor the most likely hazards you may encounter while participating in cycling activities and what you should do to anticipate, help prevent, mitigate, and respond to these hazards.
   b. Show that you know first aid for injuries or illnesses that could occur while cycling, including cuts, scratches, blisters, sunburn, heat exhaustion, heatstroke, hypothermia, frostbite, dehydration, insect stings, tick bites, and snakebite. Explain to your counselor why you should be able to identify the poisonous plants and poisonous animals that are found in your area.
   c. Explain the importance of wearing a properly sized and fitted helmet while cycling, and of wearing the right clothing for the weather. Know the BSA Bike Safety Guidelines.

2. Clean and adjust a bicycle. Prepare it for inspection using a bicycle safety checklist. Be sure the bicycle meets local laws.

3. Show your bicycle to your counselor for inspection. Point out the adjustments or repairs you have made. Do the following:
   a. Show all points that need regular lubrication.
   b. Show points that should be checked regularly to make sure the bicycle is safe to ride.
   c. Show how to adjust brakes, seat level and height, and steering tube.
4. Describe how to brake safely with foot brakes and with hand brakes.

5. Show how to repair a flat by removing the tire, replacing or patching the tube, and remounting the tire.


7.* Using the BSA buddy system, complete all of the requirements for ONE of the following options: road biking OR mountain biking.

**Option A: Road Biking**

a. Take a road test with your counselor and demonstrate the following:

   (1) Properly mount, pedal, and brake, including emergency stops.

   (2) On an urban street with light traffic, properly execute a left turn from the center of the street; also demonstrate an alternate left-turn technique used during periods of heavy traffic.

   (3) Properly execute a right turn.

   (4) Demonstrate appropriate actions at a right-turn-only lane when you are continuing straight.

   (5) Show proper curbside and road-edge riding. Show how to ride safely along a row of parked cars.

   (6) Cross railroad tracks properly.

b. Avoiding main highways, take two rides of 10 miles each, two rides of 15 miles each, and two rides of 25 miles each. You must make a report of the rides taken. List dates for the routes traveled, and interesting things seen.

c. After completing requirement b for the road biking option, do ONE of the following:

   (1) Lay out on a road map a 50-mile trip. Stay away from main highways. Using your map, make this ride in eight hours.

*The bicycle used for fulfilling these requirements must have all required safety features and must be registered as required by your local traffic laws.*
(2) Participate in an organized bike tour of at least 50 miles. Make this ride in eight hours. Afterward, use the tour’s cue sheet to make a map of the ride.

**Option B: Mountain Biking**

a. Take a trail ride with your counselor and demonstrate the following:

(1) Properly mount, pedal, and brake, including emergency stops.

(2) Show shifting skills as applicable to climbs and obstacles.

(3) Show proper trail etiquette to hikers and other cyclists, including when to yield the right-of-way.

(4) Show proper technique for riding up and down hills.

(5) Demonstrate how to correctly cross an obstacle by either going over the obstacle on your bike or dismounting your bike and crossing over or around the obstacle.

(6) Cross rocks, gravel, and roots properly.

b. Describe the rules of trail riding, including how to know when a trail is unsuitable for riding.

c. On trails approved by your counselor, take two rides of 2 miles each, two rides of 5 miles each, and two rides of 8 miles each. You must make a report of the rides taken. List dates for the routes traveled, and interesting things seen.

d. After fulfilling the previous requirement, lay out on a trail map a 22-mile trip. You may include multiple trail systems, if needed. Stay away from main highways. Using your map, make this ride in six hours.
Cycling Resources

Scouting Literature
Fieldbook; Deck of First Aid; Emergency First Aid pocket guide; First Aid merit badge pamphlet

Visit the Boy Scouts of America’s official retail website (with your parent’s permission) at http://www.scoutstuff.org for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

Books


**Magazines**

*Bicycling*
400 South 10th Street
Emmaus, PA 18098
Website: http://www.bicycling.com

*BMX Plus!*
25233 Anza Drive
Valencia, CA 91355
Website: http://www.bmxplusmag.com

*Mountain Bike*
Website: http://www.mountainbike.com

**Organizations and Websites**

*Adventure Cycling Association*
Toll-free telephone: 800-755-2453
Website: http://www.adventurecycling.org

*American Bicycle Association*
Telephone: 480-961-1903
Website: http://www.usabmx.com

*International Mountain Bicycling Association*
Toll-free telephone: 888-442-4622
Website: http://www.imba.com

*League of American Bicyclists*
Website: http://www.bikeleague.org

*National Highway Traffic Safety Administration*
Website: http://www.nhtsa.dot.gov

**National Off-Road Bicycle Association (NORBA)**
Telephone: 719-866-4581
Website: http://www.usacycling.org/mtb

**USA Cycling**
210 USA Cycling Point, Suite 100
Colorado Springs, CO 80919
Telephone: 719-434-4200
Website: http://www.usacycling.org

**Acknowledgments**

The Boy Scouts of America is grateful to Andrew Rosch, communications coordinator at Trek Bicycle Corporation, for his technical expertise and support of this new edition of the *Cycling* merit badge pamphlet. Thanks to Trek for its continued support of this merit badge and pamphlet. The Trek Bicycle Store in Madison, Wisconsin, provided many of the bicycles, helmets, and other equipment photographed for this pamphlet. We appreciate the help of the BSA’s Four Lakes Council, Madison, Wisconsin, for its help with photography arrangements. Thanks to Richardson Bike Mart and Jim Hoyt, Richardson, Texas, for assistance with photography, as well.

The BSA is thankful to Eagle Scout Peter Reigelman, a cycling enthusiast, for his assistance. We appreciate support from Philmont Scout Ranch, as well.