



# **Basic 10 Water Skills**

## **Patch Program**

Program Department  
Girl Scouts of the San Fernando Valley  
9421 Winnetka Avenue  
Chatsworth, CA 91311  
(818) 886-1801  
(818)407-4840 FAX

Prepared by: Mitzi Koch  
Nan Maples  
Sylvia Wikle

Updated by: Sandi Drummond

Basic 10 Water Skills  
Patch Program  
**TABLE OF CONTENTS**

|   |    |
|---|----|
| Objectives  | 3  |
| Target for Levels of Progression                      | 4  |
| Level I Requirements                                  | 5  |
| Level I -- Leader's Notes                             | 6  |
| Level II Requirements                                 | 10 |
| Level II Leader's Notes                               | 11 |
| Level III Requirements                                | 17 |
| Level III Leader's Notes                              | 18 |
| Level IV Requirements                                 | 22 |
| Level IV Leader's Notes                               | 24 |
| Level V Requirements                                  | 27 |
| Level V Leader's Notes                                | 28 |
| Level VI Requirements                                 | 31 |
| Level VI Leader's Notes                               | 32 |
| Level I Tracking Sheet                                | 34 |
| Level II Tracking Sheet                               | 35 |
| Level III Tracking Sheet                              | 36 |
| Level IV Tracking Sheet                               | 37 |
| Level V Tracking Sheet                                | 38 |
| Level VI Tracking Sheet                               | 39 |
| Semaphore Teaching Aide                               | 40 |
| International Code Flags Teaching Aide                | 41 |
| Spell Your Name in International Code Flags Worksheet | 42 |

Basic 10 Water Skills  
Patch Program  
OBJECTIVES

- | <u>Category</u> | <u>Title</u>   |
|-----------------|--|
| I.              | <u>Health and Safety</u><br>Be able to take care of yourself and others safely while engaging in water activities. |
| II.             | <u>Swimming</u><br>Be able to swim well enough to engage safely in boating activities.                             |
| III.            | <u>Weather</u><br>Know how to observe the weather and make decisions about your water activities.                  |
| IV.             | <u>Water Life</u><br>Be able to explore and observe water life.  |
| V.              | <u>Communication</u><br>Know how to send and receive messages across the water.                                    |
| VI.             | <u>Conservation</u><br>Know how to protect the natural water world.  |
| VII.            | <u>Water Sports</u><br>Be able to use aquatic equipment correctly and safely.                                      |
| VIII.           | <u>Rope and Knots</u><br>Be able to handle rope and tie knots, which are useful in water activities.               |
| IX.             | <u>Navigation</u><br>Be able to know where you are and how to get where you wish to go.                            |
| X.              | <u>Small Craft</u><br>Be able to use small craft correctly and safely.   |

Basic 10 Water Skills  
Patch Program  
TARGET FOR LEVELS OF PROGRESSION

- The levels of progression in Basic 10 Water Skills are approximately parallel to the levels of progression in Basic 8 Camping Skills.
- Basic 10 Water Skills is designed to prepare the successful performer to undertake competently additional badge programs and interest projects as the next step in water skills development.
- Various steps completed in the Basic 10 Water Skills Program can be used in the completion of National Girl Scout Try-its, Badges, and Interest Projects, such as:

Brownies: Outdoor Fun, Sports and Games

Juniors: Finding Your Way, Safety Sense, Swimming, Small Craft, Water Fun, Water Wonders, and Weather Watch

Cadettes & Seniors: Orienteering, Outdoor Survival, Paddle Pole, & Roll, Smooth Sailing, Watersports, and American Red Cross Swimmer.

Level I

Brownie

Grades 1, 2

Level II

Brownie / Junior

Grade 3, 4

Level III

Junior

Grades 4, 5

Level IV

Junior / Cadette

Grades 5, 6, 7

Level V

Cadette

Grades 7, 8, 9

Level VI

Senior

Grades 9, 10, 11, 12

Notes:

- Each lower level is a prerequisite for the next higher level.
- You may start Basic 10 Water Skills at any grade level.
- There is no limit to the number of levels that may be earned in one year.
- In order to earn passage of a level, girls must show competency of skills such that a girl can teach each skill to another

Basic 10 Water Skills  
Patch Program  
Level I Requirements

Date Completed

- |       |  |  |
|-------|--|--|
| I.    | Discuss where it is safe for you and your buddy to swim or play in or by the water and how to dress. Be aware of where help is available.  | _____  |
|       | Demonstrate how to put on a “life jacket” / PFD (Personal Flotation Device) out of the water. Tell why it is important to wear a PFD.  |  |
|       | Learn how to do “H.E.L.P.” and HUDDLE in the water   | _____  |
| II.   | Be able to perform the following skills: <ul style="list-style-type: none"><li>• Hold your breath for 10 seconds under water</li><li>• Breathe rhythmically in the water 10 times</li><li>• Do a face float and glide with kicking</li><li>• Do a back float and glide with kicking</li><li>• Do an arm stroke, then tread water</li></ul> | <div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div> |
| III.  | Watch clouds and share with others the imaginary creatures that the clouds suggest to you.   | _____  |
| IV.   | Find out about the life cycle of a fish, water mammal, sea bird, crustacean, or other water creature.  | _____  |
| V.    | Discuss ways to signal someone. Learn about Morse Code.  | _____  |
| VI.   | With a leader, make a list of rules for good manners at the beach or water’s edge.   | _____  |
| VII.  | Play a safe water game and know how to use a kickboard.  | _____  |
| VIII. | Learn to tie an overhand knot and a square knot. Know how they are used.   | _____  |
| IX.   | Learn how to find North, South, East, and West.  | _____  |
| X.    | With an adult learn how to safely use a paddleboat.  | _____  |

Basic 10 Water Skills  
Patch Program  
Level I - Leader's Notes

## Health & Safety

Factors, which must be considered in determining a "Girl Scout Safe" water site, are enumerated in the Girl Scout Safety-Wise. Those factors include:

|                             |                      |
|-----------------------------|----------------------|
| Weather                     | Activity Checkpoints |
| Lightening                  | Boating              |
| Safety Rules                | Canoeing             |
| Restricted Diving           | Rafting              |
| Hazards Removed             | Rowing               |
| Water Conditions            | Sailing              |
| Defined Area                | Swimming             |
| Emergency Equipment on Hand | Tubing               |
| Lifeguard / Lifesavers**    | Waterfronts          |

\*\* You must refer to "Safety-Wise" for specific standards for lifesavers and lifeguards. The safest water facilities are those where instruction and lifeguards are provided.

## Dress

Appropriate footwear should be worn to and near water sites. In some cases, enclosed footwear must be worn in the water due to hazardous footing, while in other cases thongs might be entirely appropriate. Some sort of cover-up for legs and arms must be available for even short exposure times. A windbreaker or jacket should be considered if the area could be windy.

Factors that must be taken into consideration when dressing for water activities are the range of weather conditions, duration of stay, type of activity, terrain and hazards, and available shelter.

Depending on the activity, headgear should provide protection from either glare or direct sun or both. Swimming caps may be required by the pool owner or to distinguish swimming ability in a crowded area. (See Safety-Wise)

Sun protection in the form of a waterproof sunscreen is advisable. Products should have a rating of at least 15. (Rating as high as 22 and 29 are now available.)

## Help

Help is available from site lifeguards, troop provided lifesavers, and any other adult, by telephone, and through the use of a variety of equipment as basics rescue aids, such as poles, towels, oars, ring buoys, etc. Have your girls look around a site and identify all possible sources of assistance before going into the water.

Basic 10 Water Skills  
Patch Program  
Level I - Leader's Notes

PFD

Everyone, regardless of swimming ability (or tan lines) must wear a PFD (Personal Flotation Device) at all times when boating. Even if you swim well, if you should be injured, you may not be able to swim.

Types of PFD'S

You must get a PFD and follow the instructions for putting it on out of the water. There is no alternative to this exercise for teaching the skill. (Remember, buoyant cushions are worn clutched to the chest, not on the back).

H.E.L.P. or HUDDLE

Show Example

If a victim cannot get out of the water and rescue is not imminent, additional protection against the cold can be obtained by assuming the H.E.L.P. (victim alone) or HUDDLE (several victims) positions.

**Swimming**

All swimming activities should be done in accordance with Safety-Wise.

You will need a certified (by the American Red Cross, YMCA) Lifesaver and the appropriate number of watchers for the number of girls participating to be able to complete the requirements for this level.

**Weather**

Enjoy! Consider having the girls make up stories about their cloud images or draw pictures.

**Water Life**

The life cycle starts with birth and includes dietary habits, migratory habits and sites, spawning habits and sites, life span, predators, and other threats to the survival of the species.

One good resource is Fish Do the Strangest Things by Leora Hornblow.

Basic 10 Water Skills  
Patch Program  
Level I - Leader's Notes

## **Communication**

Discuss ways of communicating an idea from one person to another (other than with the human voice or on paper), such as body language, the hand alphabet, etc. Other ideas you might draw from the girls are drums, whistles, bonfires, smoke signals, torches, flags, blinkers, mirrors, lanterns, heliographs, electronic impulses, lights, etc. Each conveys something, which can be translated into useful information. Then help the girls understand which ones can be understood at a moderate distance across water.

Morse Code: Around 1832, Samuel Morse devised his dot-dash-space code utilizing telegraph lines to transmit short and long pulses of electric current separated by intervals of no current. The Morse Code has since been adapted for use by blinkers; wigwag flags, flashlight, buzzers, etc. There have been some changes in his original patterns of “dits” and “dahs” resulting in the International Morse Code that is used today.

## **Conservation**

Good manners include:

- Do not pollute. It takes a long time to fix, is dangerous to animal life, and is unsightly.
- Do not litter. It is dangerous to animal life, can cause pollution, and is unsightly
- Do not take radios, etc. It is inconsiderate of others who are enjoying the quiet of nature.
- Leave the site the way you found it. Don't dig up plants or dig along the sides of riverbanks, it causes erosion. Don't take home any souvenirs unless the site gives you permission.

## **Water Sports**

Don't forget to note the safety cautions as indicated in the swimming requirement.

You might play a form of leapfrog with girls standing in shallow water and swimming through other girls' legs (instead of jumping over). “Streets and Alleys” could be adapted to the water, or “London Bridges.” Use your imagination, but keep it safe.

Have your Certified lifesaver teach and supervise this activity

Do not submerge the kickboard or sit on it. Do not allow it to “pop” up. Generally speaking, hold the kickboard with two hands with your arms stretched out in front of you, and use the kickboard for upper body flotation only.

## **Rope & Knots**

### **Overhand Knot**

- Used at the end or in the middle of a rope as a stopper or to prevent slipping
- To stop the end of a rope from fraying temporarily when it is not whipped
- To begin many other knots



Basic 10 Water Skills  
Patch Program  
Level I - Leader's Notes

### **Square Knot**

- To join two ropes of equal thickness (if ropes are of unequal thickness, use a sheetbend).
- To secure First Aid bandages
- To tie your Girl Scout bandana

“Left over right, and right over left. Pull ends.”



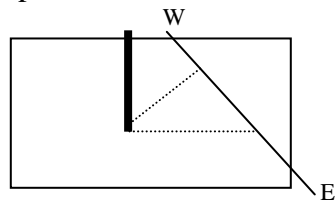
### **Navigation**

There are many ways to find the points on the compass. N-S-E-W are known as the **CARDINAL** points. You may already have a favorite way to teach this. If not, here are a couple of suggestions.

Discover the **SUN**. Where does it come up? (**EAST**)

Where does it go down? (**WEST**) Put your right arm out to the side. Point it toward the upcoming sun (**EAST**). You will now be facing **NORTH**. Put your left arm out toward the afternoon sun (**WEST**) and you will be facing **NORTH**. In both cases, **SOUTH** is behind you.

Place a large piece of paper on the ground. (8 ½ X 11 at least) Insert a stick approximately 6 inches long through the paper in a vertical position. See Diagram A.) Mark an “X” on the paper at the end of the shadow the stick makes. Wait at least 15-20 minutes and mark the end of the shadow again. Now, draw a line connecting both marks. The line will be on **EAST - WEST** line. A line drawn perpendicular to this line will be a **NORTH – SOUTH** line.



### **Small Craft – Paddle Boat**

You need a craft, and, if you do this on the water, you need a lifesaver. If you do this on land, take special precautions to prevent damage to the bottom of the boat, both interior and exterior. The boat must be fully supported.

Basic 10 Water Skills  
Patch Program  
Level II Requirements

Date Completed

- |       |   |       |
|-------|---|-------|
| I.    | Learn how to rescue a tired swimmer with a towel, pole, oar, life ring buoy, or other available equipment, without entering the water yourself.                               | _____ |
| II.   | Pass the American Red Cross "Beginner" swimming level (or higher)   | _____ |
| III.  | Learn two (2) different kinds of clouds and the kind of weather that is associated with each.   | _____ |
| IV.   | Explore a seashore, tide pool, edge of a stream, pond or lake.  | _____ |
| V.    | Learn the Morse Code letters E, I, S, H, T, M, and O.<br>Send your name and the emergency S O S signal in Morse Code.   | _____ |
| IV.   | Find out about some organizations which work to life in or near the water.  | _____ |
| VI.   | Sit across an inner tube. Be able to get in and out of the inner tube safely in shallow water. Be able to maneuver it.  | _____ |
| VII.  | Show that you can tie an overhand knot, a square knot, and a clove hitch. Know how they are used.   | _____ |
| VIII. | Be able to identify the eight (8) main points on a compass.<br>(4 Cardinal and 4 intercardinal)   | _____ |
| IX.   | Learn the parts of a rowboat and oars. Learn how to embark and disembark a rowboat safely. Learn the strokes to maneuver a rowboat. With an adult practice your rowing skills | _____ |

Basic 10 Water Skills  
Patch Program  
Level II – Leader’s Notes

**Health & Safety**

For your safety, the rule of thumb for executing a rescue is “Reach, Throw, Row”. When ever possible, you should avoid even getting into the water to assist a swimmer in distress.

In a reaching rescue, the rescuer lies flat on the deck, with body anchored and securely braced, and extends a hand, towel, ring buoy, pole, oar, board, etc. to the tired swimmer. As you are reaching for the person, remind them to keep calm.

In a throwing rescue, look around for something that will float, and is large enough to help the person stay afloat.

In a rowing rescue, use an air mattress or innertube, row or paddle out to person. Remind the students that they must row out in something that can support at least 2 people. If they can not swim don’t row

Ring Buoy and Line

Hold the ring buoy in the throwing hand, grasping it on the side away from the body. Hold it directly opposite where the line is attached. Place the foot farthest where the line is attached. Place the foot farthest from the buoy forward across the end of the line in front of the “lemon.” (See picture) The coiled line hangs over the extended and open non-throwing hand. Use an underhand toss. Aim the buoy just beyond the victim.

Leader Note: This requires lots of practice to be able to place the buoy accurately without hitting the victim. You may want to use a non-human target as the victim during practice.

Basic 10 Water Skills  
Patch Program  
Level II – Leader’s Notes

## Swimming

In addition to a certified lifesaver and watchers, you will need a Red Cross instructor to certify your girls for the “Beginner” level.

Sources for Instructors:

- Local Red Cross chapter
- City or County Recreation Departments
- High Schools (teachers or students)
- Senior Girl Scout troops
- Boy Scouts (make sure they are Red Cross certified)
- YMCA (make sure they are Red Cross certified)

## Weather

| <b>If the WIND is blowing FROM:</b> | <b>And the CLOUDS are:</b> | <b>Then the WEATHER is apt to be:</b>                                    |
|-------------------------------------|----------------------------|--|
| <b>W or NW to N</b>                 | <b>Cirrus</b>              | <b>Good</b>  |
| <b>NE or E to S</b>                 | <b>Cirrus</b>              | <b>Rainy or snowy in a day or two if the wind is steady.</b>             |
| <b>NE or E to S</b>                 | <b>Cumulus</b>             | <b>Fair – but if these clouds build up, they may bring a storm.</b>      |
| <b>NE or E to S</b>                 | <b>Cumulonimbus</b>        | <b>Rainy soon; thunderstorm</b>  |
| <b>NE to S</b>                      | <b>Stratus</b>             | <b>Rainy or snowy in fifteen or twenty hours, usually a steady rain.</b> |
| <b>Westerly</b>                     | <b>Stratus</b>             | <b>Overcast sky or light drizzle</b>                                     |

You can learn the different kinds of clouds by making a cloud chart with cotton pasted on paper.

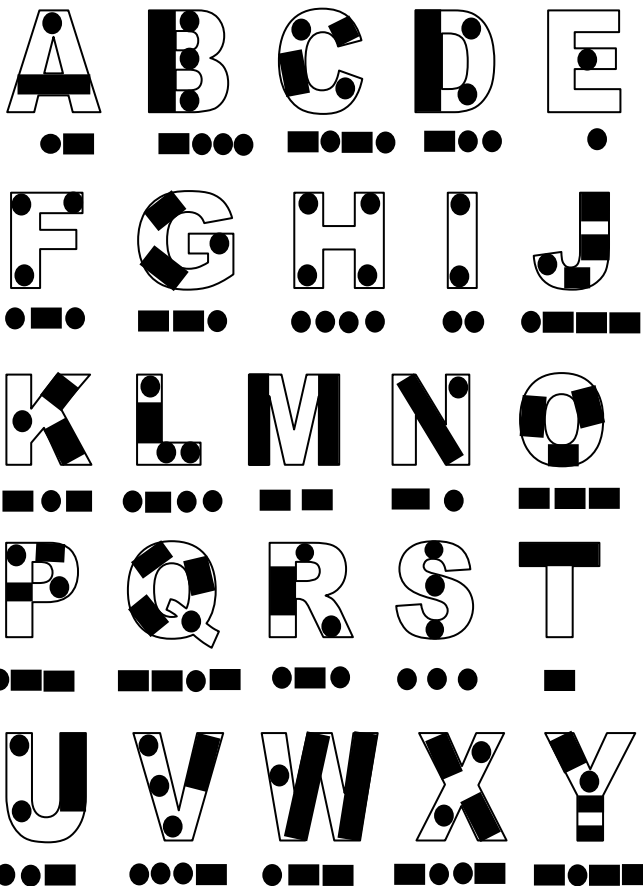
- |                       |           |  |
|-----------------------|-----------|--|
| • Stratus clouds      | look like | solid cotton strips.   |
| • Cirrus clouds       | look like | thin wisps of cotton.  |
| • Cumulus clouds      | look like | puffs of cotton.   |
| • Cumulonimbus clouds | look like | big cauliflowers with wisps of cirrus feathers coming off the top. |

## Water Life

Take a trip to a water site. Use your eyes and ears to explore, but do not disturb or destroy what you discover. With your group, make a list of all the things you discovered. You might want to draw some pictures or take your camera.

Basic 10 Water Skills  
Patch Program  
Level II – Leader's Notes

Communication  
Morse Code



*The DITS and DAHS are the thick dots and dashes placed on each letter so that they read from top to bottom or left to right (or both), and are outlined in correct order below the letters.*

In the case of wigwag flags, the sender's right side is the DOTS (or dits), and the sender's left side is the DASHES (or dahs).

Basic 10 Water Skills  
Patch Program  
Level II Leaders Notes

A DIT = 1 unit of time

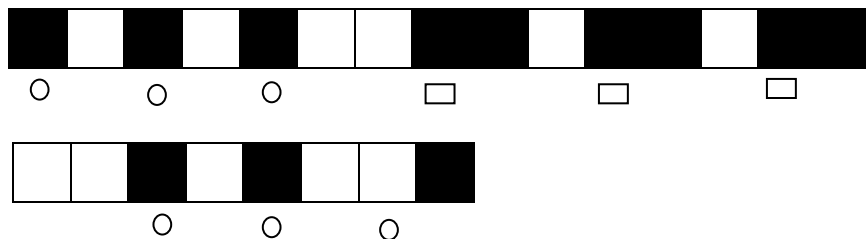
A DAH = 2 units of time

The interval between components of a letter = 1 unit of time

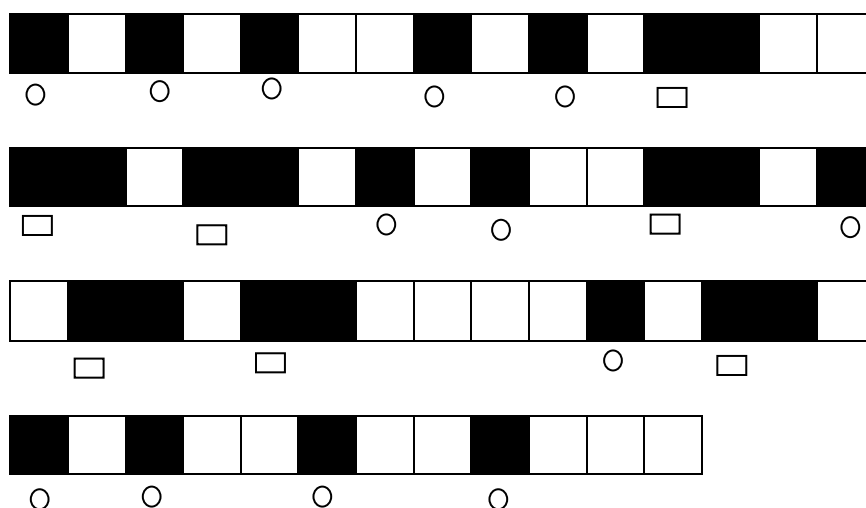
The interval between two tellers = 2 units of time

The interval between words = 4 units of time

So, S O S would go like this . . .



The name SUZY LEE would go like this . . .



### Conservation

This list is a beginning. There will be local groups in your area as well. Check Websites also.

- The Costal Commission
- The Audubon Society  
950 Third Ave.  
New York, NY 10022
- World Wildlife Fund
- Sierra Club
- U. S. Fish and Wildlife Service  
Washington, DC 20240
- National Wildlife Federation  
1412 16<sup>th</sup> Street, N. W.  
Washington, DC 20036
- Greenpeace

Basic 10 Water Skills  
Patch Program  
Level II Leader's Note

**Water Sports - Inner tube**

Watch out for the air valve! Don't forget Lifeguard.

Maneuver means: Using your arms as paddles, move yourself and the craft forward and backwards in a straight line for at least ten (10) feet, and turn to the right and left upon command and proceed in another direction.

You might want to set up a course for a relay race to practice these skills.

**Rope & Knots**

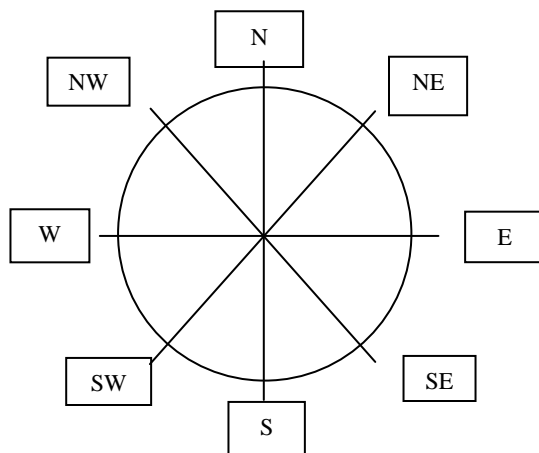
**Clove Hitch**

- To secure a boat or floating object to a stationary piling (post)
- To attach your clothesline to a tree



**Navigation**

The girls have learned the four CARDINAL points of the compass. The next four to learn are the four INTERCARDINAL points. Use a blackboard, flip chart, paper and pencil, sand diagram, or whatever, bisect each quadrant of a circle in half and name each POINT as shown in Diagram B. Show the girls a real compass. Let each girl touch, look, and see how the NEEDLE always points the same way – NORTH. Move the compass around so the compass card reads NORTH under the needle. The compass is now ready to use as a direction finder.



Basic 10 Water Skills  
Patch Program

**Small Craft**

**Rowboat & Oars**

You need a craft, and, if you do this on the water, you need a lifesaver. If you do this on land, take special precautions to prevent damage to the bottom of the boat, both interior and exterior. The boat must be fully supported.



Basic 10 Water Skills  
Patch Program  
Level III Requirements

Date Completed

- |       |  |                    |
|-------|--|--------------------|
| I.    | Complete the requirements for the First Aid Badge  | _____              |
| II.   | Be able to perform the following skills: <ul style="list-style-type: none"><li>• Make the Buddy System really work every time you swim. Use or fix up a “buddy board.” Pair off swimmers of equal ability. Practice “buddy calls” until every pair of buddies gets together quickly</li><li>• Show that you can breath in the water with an easy rhythm. For 2 minutes, take breaths while you bob up and down in the water over your head or while you float face down, turn your hear to the side and breathe.</li><li>• Glide 2 meters. Kick only for 6 meters. Do only an arm stroke for 6 meters.</li></ul> | _____<br><br>_____ |
| III.  | Know what the Beaufort Scale is and what it measures. Be able to tell at what level on the Beaufort Scale small craft must be removed from the water.  | _____              |
| IV.   | Visit and explore an aquarium, a marine nature center, a water life sanctuary, or some other site, which has been set aside for teaching about water life.   | _____<br>_____     |
| V.    | Learn about the procedures that are used for sending and receiving messages.   | _____              |
| VI.   | Explore how plants and sea life depend upon each other. Demonstrate, in any way you wish, the “Water Cycle.”   | _____              |
| VII.  | Be able to maneuver safely a “boogie board.”   | _____              |
| VIII. | Show that you can tie an overhand knot, a square knot, a clove hitch, and a bowline. Demonstrate the uses of each knot.  | _____              |
| IX.   | Learn to use a compass. Be able to site on an object and name the direction in which the object lies. You may use either letters or degrees.   | _____              |
| X.    | Learn the parts of a canoe and paddle. Be able to get in and out of a canoe safely in shallow water. Be able to maneuver it.   | _____              |

Basic 10 Water Skills  
Patch Program  
Level III – Leader’s Notes

## Health & Safety

Earn the First Aid Badge

## Swimming

**Buddy System:** A safety practice in which girls are paired to keep watch over each other. The paired girls should be of equal ability. (If you have an uneven number of girls, you may have one “truddy” – 3 girls).

**Buddy Call:** Any agreed upon signal at which the buddies must find each other quickly and raise joined hands. (Count: “1 chimpanzee, 2 chimpanzees, 3 chimpanzees, Ape!” Buddies should be together by “Ape”).

**Buddy Board:** A check board system indicating, by buddies, who is in or out of the water and in which area.

**\*\*Don’t forget your certified lifesaver and the appropriate number of watchers.**

## Weather

| Beaufort Scale of Wind Velocity |                          |                 |  |
|---------------------------------|--------------------------|-----------------|--|
| Beaufort Reading                | Speed                    | Description     | Observe  |
| 0                               | 0-1 mph<br>0-1 knot      | Calm            | No wind at all<br>Smoke rises vertically<br>Sailing craft becalmed<br>Sea is like a mirror                                   |
| 1                               | 1-3 mph<br>1-3 knots     | Light air       | Smoke drifts slowly<br>Wind vanes do not move<br>Ripples on the water  |
| 2                               | 4-7 mph<br>4-6 knots     | Slight breeze   | Feel wind on face<br>Leaves rustle<br>Small wavelets<br>Sailing craft close hauled   |
| 3                               | 8-12 mph<br>7-10 knots   | Gentle breeze   | Leaves, twigs, loose paper move constantly<br>A light flag waves<br>Good kite flying weather<br>Very small waves with crests |
| 4                               | 13-18 mph<br>11-16 knots | Moderate breeze | Dust, snow, papers blow about<br>Small branches move<br>Ideal sailing weather  |
| 5                               | 19-24 mph<br>17-21 knots | Fresh breeze    | Take care with all fires<br>Small trees or shrubs sway<br>Moderate sized waves<br>Dust devils stirred up                     |
| 6                               | 25-31 mph<br>22-27 knots | Strong breeze   | Large branches sway<br>Wires whistle<br>Difficult to use umbrella<br>Small craft off water                                   |
| 7                               | 32-38 mph<br>28-33 knots | Moderate gale   | Whole trees in motion<br>Inconvenience in walking<br>Waves beginning to build  |
| 8                               | 39-46 mph<br>34-40 knots | Fresh gale      | Twigs break off trees<br>Storm warnings hoisted<br>Garbage cans overturned   |

Basic 10 Water Skills  
Patch Program  
Level III Leaders Notes

## **Water Life**

Compare what you discovered at the controlled site to what you discovered on your own in Level I.

## **Communication**

The sender must get the attention of the receiver by some method. When sending pulse Morse Code, the sender sends the letters “CQ” to get attention. When using wigwag flags, the sender must wave the flags to get attention. Either way, the receiver must acknowledge that she is ready to receive the message by sending or signaling the letter “K”.

If the receiver needs a letter or word repeated, she signals the letters “IMI”. (Think of this as saying, “I Missed It!”) The sender must then repeat the ENTIRE WORD (never a single letter) since she has no way of knowing which letter was missed. If the sender makes a mistake, she sends a series of the letter “E” (usually 5 or 6 in a row).

The sender finishes her message with the letters “AR”. (Think of this as saying, “All Received?”).

The receiver acknowledges with the letter “R”. (Think of this as saying, “Received!”).

## **Conservation**

### **The Water Cycle**

#### Heat and Atmospheric Water

Heat evaporates millions of tons of water into the air daily. Lakes, streams, and oceans send up a steady stream of water vapor. An amazing amount of water transpires from the leaves of green plants. A single apple tree may move 1800 gallons of water into the air in a six-month growing season.

As moist warm air rises, it slowly cools. Finally it cools so much that its relative humidity reaches 100 per cent. Clouds form and, under certain conditions, rain or snow come down. This eternal process of evaporation, condensation, and precipitation is called the water cycle.

You could have the girls draw pictures of this. One real fun way to demonstrate the water cycle is to be creative and do it as a drama.

Some of the examples you could research that relate to dependency are:

- What do sea otters eat?
- Why do sea otters need kelp beds?
- The hermit crab uses the shells of other sea life for protection. How do they go about getting those other shells?
- Coral reefs have a particularly delicate balance, which you may want to explore.

Basic 10 Water Skills  
Patch Program  
Level III Leader's Notes

Middle School science teachers and High School biology teachers can be excellent resources. Also, check your local PBS (and other) stations for television specials on nature and sea life. Look for National Geographic and Cousteau Society presentations, etc.

### **Water Sports - Boogie Board**

Have your certified lifesaver teach and supervise this activity.

Depending on the size of the girl and boogie board have the girl hold the boogie board on each side about  $\frac{1}{4}$  of the way down. Rest the bottom of the board on the knees. In shallow water (about knee high) with your back to the waves hold the boogie board in front of you. Wait until the wave hits the back of your legs, fall forward onto the board. Hold tight and ride the wave in.

When the girls have practiced and become more experienced you may allow them to go in a little deeper water (about waist high).

### **Rope & Knots**

#### **Bowline**

The bowline has been called the king of knots. It will never slip or jam if properly made, and thus, is excellent for tying around a person in a rescue. Begin by forming an overhand loop in the standing part. Then take the free end up through the eye, around the standing part, and back where it came from.



### **Navigation**

This is best accomplished outside at a meeting or on a day outing. You will need at least one compass for each 4 girls, or one may be passed around from group to group. Explain how the needle always points to magnetic NORTH. (The needle is being pulled towards the earth's magnetic pole.) The compass must be held flat or laid on the ground. Turn the compass until the needle is on NORTH.

Have the girl face standing North and, without moving the compass, sight across the compass to an object that is NORTH and name it. Choose another object in a different direction. Then have the girl sight over the compass to that object and read the direction from the face of the compass. Continue in this fashion. You could devise a game ahead of time with predetermined object and have the girls discover their directions.

### **Small Craft - Canoe**

You need a craft, and, if you do this on the water, you need a lifesaver. If you do this on land, take special precautions to prevent damage to the bottom of the boat, both interior and exterior. The boat must be fully supported.

Step to the center of the craft, keeping your body weight (your bottom) low in a crouch, and holding the sides of the craft. Never stand up in a small craft. Get out in a similar manner.

Basic 10 Water Skills  
Patch Program  
Level IV Requirements

Date Completed

- I. Learn First Aid for the treatment of hypothermia, sunburn, heat exhaustion, heat stroke. \_\_\_\_\_
- II. Pass the American Red Cross “Advanced Beginner” swimming Skill level (or higher). In addition, be able to do the following: \_\_\_\_\_
- Go over ways to help yourself in case you accidentally fall in or get in trouble in the water. \_\_\_\_\_
  - Show that you know how to: Cooperate with someone who is trying to rescue you, keep afloat with clothing or other aids, use good sense in cold water, in deep water, in a current, and in rough water. \_\_\_\_\_
  - Do two (2) of the following strokes for 50 yards each: crawl, elementary backstroke, sidestroke, or breaststroke. \_\_\_\_\_
  - Look under the surface. Show that you can do a surface dive or dive from a deck, swim underwater, and bring up something from the bottom. \_\_\_\_\_
  - Show easy entry into the water in two (2) different dives from a low board or deck. Check water depth and hazards first. \_\_\_\_\_
- (At this point you have completed the Swimming Badge, if you have completed the previous levels. See Girl Scout Badges and Signs.)
- III. Know what a barometer, thermometer, and hygrometer are and what they tell about the weather. \_\_\_\_\_
- IV. Find out what is unique about the water life in your locality that is different from the water life in some other area(s) \_\_\_\_\_
- V. Become familiar with semaphore flag signaling and International Code flags. Learn to send the emergency S O S signal using semaphore flags. Spell your name in International Code flags. \_\_\_\_\_
- VI. Learn and understand the Conservation Pledge. Discover some effects of man’s interference with the natural water cycle in your area. \_\_\_\_\_
- VII. Learn and practice water aerobatics, or water polo. \_\_\_\_\_

Basic 10 Water Skills  
Patch Program  
Level IV Requirements cont.

- VIII. Show that you can tie an overhand knot, a square knot, clove hitch, bowline, two half hitches, and a sheet bend. Know how they are used. \_\_\_\_\_
- IX. Lay a compass trail for someone to follow. Follow a compass trail that someone else has laid for you. \_\_\_\_\_
- X. Learn the parts of a kayak and paddle. Learn how to embark and disembark safely. Be able to maneuver a kayak. Practice your skills. \_\_\_\_\_

Basic 10 Water Skills  
Patch Program  
Level IV – Leader’s Notes

### Health & Safety

| Condition   | Symptom.  | Treatment.   |
|---|---|--|
| Heat Exhaustion<br>Early Hyperthermia                             | Pale, clammy skin. Profuse perspiration. Extreme tiredness or weakness. Body temperature normal. Possible headache, vomiting.   | Provide bed rest. Give salt solution: ½ tsp. salt in ½ glass water every 15 min, for 3 – 4 doses.  |
| Heat Stroke<br>(Always life threatening)<br>Advanced Hyperthermia | Red, flushed skin. Hot dry, skin. Extremely high (106° F) body temperature. Possible dizziness, nausea, headache, rapid pulse, unconsciousness  | Cool victim to 102° F quickly by soaking in cool water, sponging body with rubbing alcohol, or pouring water on the body. Do not give coffee, tea, or alcohol. Put to bed. Get medical help.   |
| Hypothermia   | Uncontrollable shivering, vague, slow, slurred speech. Memory lapses, incoherence. Visible lack of coordination: immobile, fumbling hands, frequent stumbling, and lurching gait. Drowsiness (to sleep is to die). Apparent exhaustion. | Make sure victim has an open airway and is able to breathe. Check for respiration and pulse. Start CPR if necessary. Prevent further heat loss.<br>Gently 1) move victim to shelter and warmth, 2) remove all wet clothing, 3) wrap victim in blankets or sleeping bag. You may place gentle sources of heat at the victim’s neck, groin, and sides of chest. Transport to a hospital<br>.Do not: 1. Place victim in a bath tub<br>2. give victim <u>anything</u> to drink<br>3. rub victim’s skin |
| Sunburn   | Mild pinkness of skin (1 <sup>st</sup> degree).....<br>Swelling and blistering (2 <sup>nd</sup> degree)....   | Cool to reduce pain.<br>Seek medical care.   |

Mouth-to-Mouth resuscitation: Have a certified instructor to assist you in training this skill: Red Cross, Fire Department, nurses, etc.)

### Swimming

In addition to a certified lifesaver and watchers, you will need a Red Cross instructor to certify your girls for the “Advanced Beginner” level. Use your instructor to help with the additional swimming requirements at this level.

Basic 10 Water Skills  
Patch Program  
Level IV Leader's Notes

### Weather

|              |   |
|--------------|---|
| Anemometer:  | Measures wind speed.  |
| Barometer:   | Indicates changes in atmospheric pressure. The average good weather reading is 29.9 to 30.0 inches. A rapid rise hails the approach of good weather, as far as rain is concerned, but may also mean wind. A sudden drop means strong winds and wet weather if clouds indicate rain. |
| Hygrometer:  | Measures the degree of moisture in the air. Cold air can hold less moisture than hot air. When the percentage reaches 100%, there will be precipitation.  |
| Thermometer: | Measures the degree of temperature.   |

### Water Life

One way to explore differences is to use the encyclopedia to answer the following questions or similar ones:

1. Why does coral live only in the South Pacific Ocean?
2. Why do trout live only in lakes or streams?
3. Why do sardines live only in cool seas?
4. Why do tuna live only in the ocean?

Then discover one unique feature about the water life in your own area. You might want to call or write your local Fish and Game Department.

### Communication

The same general procedure governs the sending of both semaphore and Morse Code. Semaphore is the quickest sight method of sending messages since each motion or position is a single letter, whereas in Morse Code, one needs to send an average of 3 motions or positions per letter.

The procedures concerning use of International Code flags are somewhat more sophisticated and include the additional concept of certain signal flags having the meaning of a whole sentence. For our introductory purpose, just expose the girls to the simple alphabet in the colorful flags.

See the end of this Leader's Guide section for full-page semaphore and International Code Flag instructions.

### Conservation

The Conservation Pledge: "I give my pledge as an American to save and faithfully to defend from waste the natural resources of my country - - its soil and minerals, its forests, waters and wildlife."

Go over the wording with the girls to make sure they understand each term. Many girls don't know what "natural resources" means.

"Interference" (negative or positive) could mean:

- |                    |                |
|--------------------|----------------|
| •Pollution         | •irrigation    |
| •acid rain         | •forest fires  |
| •dams              | •reforestation |
| •unchecked erosion |                |

You might explore the organizations listed in Level II as further resources.



Basic 10 Water Skills  
Patch Program  
Level IV Leader's Notes

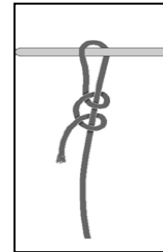
**Water Sports - Water Aerobics / Water Polo**

Have your Certified lifesaver teach and supervise this activity or attend a class.

**Rope & Knots**

Two half hitches or Double Half Hitch

- To attach a rope to a pole, mooring, or ring.
- Make two half hitches, one after the other.
- To finish, push them together and snug them by pulling on the standing part.



Sheetbend

- To join two rope ends, especially if the ropes are of different thickness. (Sailors named it in the days of sailing ships when they would “bend” (tie) the “sheet” (ropes in the rigging of a ship.)
- Begin with a bite (loop) in the thicker rope.
- Then weave the end of the thinner rope up through the eye, around the bight, and back under itself.
- Snug it carefully before applying any strain to the knot.



**Navigation**

A trail laid by one group and followed by another can be great fun for all. You can make a treasure hunt where there is a “treat” for the patrol at the end by using compass directions to guide the progress of the patrol. (See Junior Girl Scout Handbook)

**Small Craft**

Kayak and paddle

You need a craft, and, if you do this on the water, you need a lifesaver. If you do this on land, take special precautions to prevent damage to the bottom of the boat, both interior and exterior. The boat must be fully supported.

Step to the center of the craft, keeping your body weight (your bottom) low in a crouch, and holding the sides of the craft. Never stand up in a small craft. Get out in a similar manner.

Basic 10 Water Skills

Patch Program

Level V Requirements

Date Completed

- I. Complete a basic first aid and CPR course. \_\_\_\_\_
- II. Recover yourself after falling into water over your head with clothes and shoes on, and, for 5 minutes, remain afloat (Survival float) and or tread water. \_\_\_\_\_
- Pass the American Red Cross “Intermediate” swimming skill level (or Higher) including practicing “H.E.L.P.” and “HUDDLE.” \_\_\_\_\_
- III. Learn what tides and currents are and what hazards tides and currents present. \_\_\_\_\_
- IV. Discover at least two (2) art forms that use as their medium substances which come from water environments, or discover at least two (2) art forms that have water life as their subjects. \_\_\_\_\_
- V. Try sending and receiving messages by using any of the following:  
• Buzzer, drum, flashing lights (Morse Code)  
• Morse code flag signaling  
• Semaphore flags  
• International Code flags \_\_\_\_\_
- VI. Find out how little it takes to damage the oceans, lakes, or rivers by doing a clean-up project by, in, or near the water . \_\_\_\_\_
- VII. Learn about snorkeling. (See page 123 in Safety-wise) \_\_\_\_\_
- VIII. Demonstrate tying and the uses for the following:  
• Slip knot • Belay to a cleat  
• Fisherman’s knot • Reef knot  
• Timber hitch • Figure eight  
Discover one or two ways to keep the ends of a rope from fraying. \_\_\_\_\_
- IX. Learn about some aids to navigation and what they stand for such as buoys, beacons, radio direction finders (RDF), lighthouses, etc. \_\_\_\_\_
- X. Learn the parts of a windsurf board and sail. Be able to safely maneuver Practice your skills. \_\_\_\_\_

Basic 10 Water Skills  
Patch Program  
Level V – Leader’s Notes

**Health & Safety**

Complete and pass Community First Aid and Safety.

**Swimming**

\*\*Don’t forget your certified lifesaver and the appropriate number of watchers.

In addition to a certified lifesaver and watchers, you will need a Red Cross instructor to certify your girls for the “Intermediate” level. Use your instructor to help with the additional swimming requirements at this level.

[Survival Float](#)

**Weather**

Tide is the daily rising and falling of the sea, caused by the moon, and to a lesser extent by the sun.

Current is the flow of water in a given direction.

A current may always flow in the same direction (such as a river current), while the tide flows “in” and “out” according to the moon phases.

A rip-tide is a current in the ocean which goes in a different direction from the rest of the water. It is dangerous to swimmers.

Avoid turning broadside to a strong current.

It will be easy to row or canoe with the current, but it will be more difficult against the current. Currents may force the boat onto rocks or far from shore.

**Water Life**

Consider driftwood, coral, shells, pearls, mother of pearl, sea fans, etc. as substances. Maybe produce a water subject mural, sculpture, mosaic, or scrapbook as a group.

**Communication**

Hint—To avoid frustrations while learning to send and receive a code, have the receiver acknowledge EACH LETTER after it is sent, rather than after each word.

**Conservation**

The “Human Vacuum Cleaner” procedure or “Trash Trudge” can be done as follows: Walk in a line, side by side, about an arm’s length apart, with trash bags, picking up anything that was not put there by nature.

You could ask an organization if there is a project that you could do in your area. Don’t forget your Girl Scout council or camp.

**Water Sports - Snorkling**

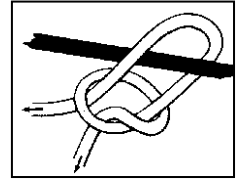
Have your Certified lifesaver teach and supervise this activity. Attend a snorkeling class.

Basic 10 Water Skills  
Patch Program  
Level V - Leader's Notes

## Rope & Knots

### Slip knot

- This knot is not as satisfactory as the double half hitch because, unless strain is put on it, it may slide—especially on a vertical object like a post.
- Basically, it is an overhand knot around the standing part.
- It will be more secure if a stopper knot, like an overhand or figure eight knot follows it.



### Fisherman's knot

- The fisherman's knot is used for joining two fine lines such as fishing leaders.
- It is simply two overhand knots, one holding the right-hand line, and the other the left-hand line.
- Pull each of the two overhand knots taut separately.
- Then make the whole knot taut so that the two overhand knots come together by pulling on the standing parts of each line.



### Timber hitch

- This is an important hitch, especially for dragging a heavy object like a log.
- It will hold firmly so long as there is a steady pull; slacking and jerking may loosen it.
- The timber hitch is also useful in pioneering when two timbers are “sprung” together.
- When it is used for dragging, a simple hitch should be added near the front end of the object to guide it.



### Bowline

- The bowline has been called the king of knots.
- It will never slip or jam if properly made, and thus, is excellent for tying around a person in a rescue.
- Begin by forming an overhand loop in the standing part.
- Then take the free end up through the eye, around the standing part, and back where it came from.



### Reef knot

- The reef knot is used for joining two ropes of equal thickness.
- Hold one rope in each hand. Cross the right one over the left, and bring it under and around.
- Then cross the one that is on the left over the one on the right, and bring it under and around.
- “Left over right, and right over left. Pull ends.”
- The reef knot can be easily loosened by either pushing the ends toward the knot, or by upsetting the knot by pulling back on one end and pulling the other through the loops.



Basic 10 Water Skills  
Patch Program

Level V – Leader's Notes

Figure eight

- Used only at the end of a rope as a stopper or to prevent slipping through an opening (Is more effective than an overhand knot and is easier to untie.)
- Form a loop in your rope, and put your finger in the eye.
- Twist one full turn, and bring the end on at the top of the cross behind, and up through the eye. Pull tight.

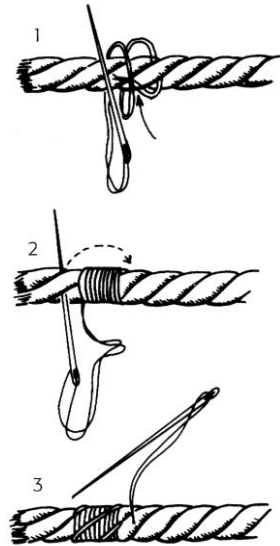


Ways to keep the end of a rope from fraying:

1. Whipping (see diagram)

- Thread needle with twine, double over, run through beeswax
- Bring needle up through center of rope approximately two rope diameters from end, leaving approximately ½ inch of tail folded back toward end of rope (1)
- Wrap twine neatly and tightly around rope, over the tail of twine
- Continue to wrap until the length of the whipping is approximately the diameter of the rope (2)
- Bring needle under one strand at the edge of the whipping (2)
- Follow the lay of the rope and insert needle under the next strand at the other edge of the whipping (2)
- Continue back and forth until the twine surrounds the whipping in all three of the grooves (3)

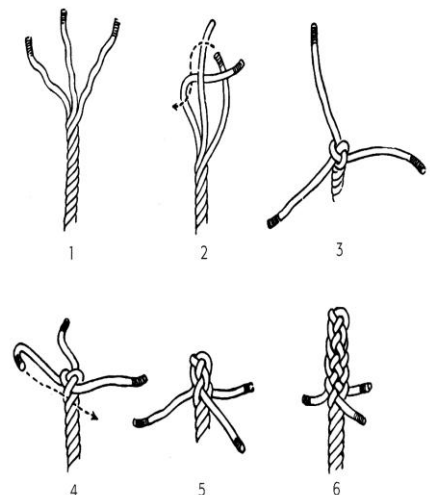
Finish by bringing needle up through the center of a strand (3)



2. For ropes of synthetic fibers like nylon, one can fuse the strands by applying enough heat to the raw ends.

3. For a more permanent and satisfying treatment on a natural fiber rope, you can use a back splice. This, however, makes a small lump on the rope that may be undesirable for some specific uses. (See diagram).

- Unlay the rope for a distance approximately 12 times the diameter of the rope
- Bring each unlaid strand over the strand to its left and under the strand to its right, as shown (1, 2)
- Tighten the crown knot evenly (3)
- Bring each unlaid strand over the closest strand and tuck tightly under the next standing strand (4)
- Tighten all three tucked strands evenly (5)
- Repeat tucks in the same order, passing each tucked



## Basic 10 Water Skills

### Patch Program

#### Level V – Leader's notes

strand over the closest standing strand and under the next one (5)

- After three complete tucks, taper each strand by cutting off one third of the fibers
  - Repeat tucks and tapers, this time cutting off one half of the fibers after the tuck
- Finish with a final tuck with each strand and cut off remaining fibers

### **Navigation**

Aids to navigation to the sailor are like road signs to the driver on land. The sailor's "chart" is his road map. Buoys, day markers, beacons, a lighthouse, and radio directional finders (RDF's) to the sailor are like stop signs, detour signs, and street signs to the landlubber.

### **Small Craft**

#### Windsurfing

You need a craft, and, if you do this on the water, you need a lifesaver. If you do this on land, take special precautions to prevent damage to the bottom of the board.

Basic 10 Water Skills  
Patch Program  
Level VI Requirements

Date Completed

- |       |   |       |
|-------|---|-------|
| I.    | Complete the requirements for the American Red Cross First Aid and Safety and CPR.  | _____ |
| II.   | Pass the American Red Cross “Basic Water Rescue” swimming skill level or equivalent.  | _____ |
| III.  | Know what a “small craft advisory” is and which signal indicates that craft must be removed from the water.   | _____ |
| IV.   | Learn about a career that has to do with water life.  | _____ |
| V.    | Show your communication skills by teaching at least one of the communication skill requirements from this patch program to younger Girl Scouts  | _____ |
| VI.   | Demonstrate to younger Girl Scouts the “Water Cycle”.   | _____ |
| VII.  | Teach a level III their water sport activity – Boogie Boarding or learn to play Water Polo.   | _____ |
| VIII. | Learn about Marlinspike. Learn and practice the following: <ul style="list-style-type: none"><li>• Eye splice                      • Short Splice</li><li>• Back Splice                    • Needle whipping</li><li>• Rope Grommet                • Sewn grommet</li></ul> | _____ |
| IX.   | Learn about Charting.   | _____ |
| X.    | Learn the parts of a Sailboat. Be able to safely rig a sailboat and know the points of sail. Practice your skills.  | _____ |

## Basic 10 Water Skills Patch Program

### Health & Safety

Pass American Red Cross First Aid and Safety.

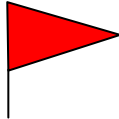
### Swimming

Don't forget your certified lifesaver and the appropriate number of watchers.

In addition to a certified lifesaver and watchers, you will need a Red Cross instructor to certify your girls for the "Advanced Beginner" level. Use your instructor to help with the additional swimming requirements at this level.

### Weather

Small Craft Advisory is a red pennant flown alone. It indicates that winds and seas, or sea conditions alone are considered hazardous to small craft. You must not go out. If you are out, you must return immediately.



### Water Life

Some ways to explore careers that are connected with water life is to call or write your local Fish and Game Department, University or college, or Aquarium.

### Communication

### Conservation

Be sure to follow Safety-Wise guidelines – under Service Projects page 43

### Water Sports

Have your Certified lifesaver supervise this activity.

### Rope & Knots

Eye Splice

- 

Short Splice

- 

Back Splice

- 

Needle whipping

- 

Rope grommet

- 

Sewn grommet

-



Basic 10 Water Skills  
Patch Program

**Navigation**  
Charting

**Small Craft**  
Sailboat

|  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

## Patch Program

| Basic 10 Water Skills Level I   | FIRST NAME |    | LAST NAME |    |
|---|------------|----|-----------|----|
|   |            |    |           |    |
| I. Health & Safety <ul style="list-style-type: none"><li>•Safe to swim</li><li>•How to dress</li><li>•Where to get help</li><li>•Put on PFD</li><li>•Why PFD important</li><li>•HELP &amp; HUDDLE</li></ul> |            |    |           |    |
| II. Swimming <ul style="list-style-type: none"><li>•Hold breath 10 sec.</li><li>•Breathe rhythm 10 X</li><li>•Face, glide, kick</li><li>•Back, glide, kick</li><li>•Arm stroke, tread</li></ul>             |            |    |           |    |
| III. Weather <ul style="list-style-type: none"><li>•Cloud Images</li></ul>  |            |    |           |    |
| IV. Water Life <ul style="list-style-type: none"><li>•Life cycle</li></ul>  |            |    |           |    |
| V. Communications <ul style="list-style-type: none"><li>•Ways to Signal</li><li>•Learn about Morse Code</li></ul>   |            |    |           |    |
| VI. Conservation <ul style="list-style-type: none"><li>•Rules for good manners</li></ul>  |            |    |           |    |
| VII. Water Sports <ul style="list-style-type: none"><li>•Play safe water game</li><li>•learn to use kickboard</li></ul>   |            |    |           |    |
| VIII. Ropes & Knots <ul style="list-style-type: none"><li>•Tie overhand</li><li>•Tie square knot</li><li>•Know how used</li></ul>   |            |    |           |    |
| IX. Navigation <ul style="list-style-type: none"><li>•Find North, South, East, &amp; West</li></ul>   |            |    |           |    |
| X. Small Craft <ul style="list-style-type: none"><li>• Use paddleboat safely</li></ul>  |            |    |           |    |
|   | 1          | 2  | 3         | 4  |
|   | 5          | 6  | 7         | 8  |
|   | 9          | 10 | 11        | 12 |
|   | 13         | 14 | 15        | 16 |
|   | 17         | 18 | 19        | 20 |
|   | 21         | 22 | 23        | 24 |
|   | 25         | 26 | 27        | 28 |
|   | 29         | 30 |           |    |

## Patch Program

| Basic<br>10 Water Skills<br>Level II   | FIRST NAME                                     | LAST NAME |
|--|--|-----------|
|  | I. Health & Safety<br>• Rescue a tired swimmer |           |
| II. Swimming<br>• Pass the American Red Cross “Beginner” swimming level (or higher)  |  |           |
| III. Weather<br>• Learn two different kinds of clouds.<br>• Learn weather associated with each   |  |           |
| IV. Water Life<br>• Explore seashore, tide pool, edge of stream, pond or lake.   |  |           |
| V. Communications<br>• Learn Morse code letters E,I,S,H,T,M,O.<br>• Send your name in Morse code.<br>• Send emergency SOS in Morse code.       |  |           |
| VI. Conservation<br>• Find Organizations that protect life in or near the water  |  |           |
| VII. Water Sports<br>• Sit ion an inner tube<br>• Get in and out safely in shallow water.<br>• Be able to maneuver                             |  |           |
| VIII. Ropes & Knots<br>• Learn to tie and know how the following are used<br>➤ Overhand knot<br>➤ Square knot<br>➤ Clove hitch                 |  |           |
| IX. Navigation<br>• Identify the eight (8) main point on a compass   |  |           |
| X. Small Craft<br>• Learn parts of a rowboat and oars<br>• Learn how to embark and disembark safely.<br>• Practice your skills with and adult. |  |           |
|  | 1  |           |
|  | 2  |           |
|  | 3  |           |
|  | 4  |           |
|  | 5  |           |
|  | 6  |           |
|  | 7  |           |
|  | 8  |           |
|  | 9  |           |
|  | 10   |           |
|  | 11   |           |
|  | 12   |           |
|  | 13   |           |
|  | 14   |           |
|  | 15   |           |
|  | 16   |           |
|  | 17   |           |
|  | 18   |           |
|  | 19   |           |
|  | 20   |           |
|  | 21   |           |
|  | 22   |           |
|  | 23   |           |
|  | 24   |           |
|  | 25   |           |
|  | 26   |           |
|  | 27   |           |
|  | 28   |           |
|  | 29   |           |
|  | 30   |           |

# Basic 10 Water Skills Patch Program

| Basic 10 Water Skills Level III  | LAST NAME  |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
|--|------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|
|  | FIRST NAME |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| I. Health & Safety<br>• Complete the requirements for the First Aide Badge   |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| II. Swimming<br>• Learn and use the Buddy system.<br>• Breath in the water with an easy rhythm for 2 minutes<br>• Glide for 2 meters<br>• Kick for 6 meters<br>• Arm stroke for 6 meters |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| III. Weather<br>• Know the Beaufort Scale  |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| IV. Water Life<br>• Visit and explore a site which teaches about water life.   |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| V. Communications<br>• Learn procedures used for sending and receiving messages  |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| VI. Conservation<br>• Demonstrate the “Water Cycle”  |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| VII. Water Sports<br>• Be able to safely maneuver a “boogie board”   |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| VIII. Ropes & Knots<br>• Demonstrate the uses of the following knots:<br>➤ Overhand knot<br>➤ Square knot<br>➤ Clove hitch<br>➤ bowline  |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| IX. Navigation<br>• Learn the compass<br>• Site on an object and name the direction which the object lies  |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
| X. Small Craft<br>• Learn the parts of a canoe and paddle<br>• Be able to embark and disembark safely<br>• Be able to maneuver safely  |            |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |
|  | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |  |  |
|  | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |  |  |

# Basic 10 Water Skills Patch Program

| Basic 10 Water Skills Level IV  | LAST NAME |    | FIRST NAME |    |
|---|-----------|----|------------|----|
|   |           |    |            |    |
| I. Health & Safety<br>• Learn First Aid treatment for the following:<br>• Hypothermia, Sunburn, Heat Exhaustion, Heat stroke  |           |    |            |    |
| II. Swimming<br>• Pass the American Red Cross “Advanced Beginner” swimming skill level (or higher)  |           |    |            |    |
| III. Weather<br>• Know what the following are and what they tell about the weather<br>➤ Barometer, Thermometer, Hygrometer  |           |    |            |    |
| IV. Water Life<br>• Find out what is unique about the water life in your area   |           |    |            |    |
| V. Communications<br>• Become familiar with semaphore flag signaling and International Code flags<br>• Learn to send emergency SOS signal using semaphore flags<br>• Spell you name in International Code flags |           |    |            |    |
| VI. Conservation<br>• Learn and understand the Conservation Pledge  |           |    |            |    |
| VII. Water Sports<br>• Learn and practice water <a href="#">arobics</a>   |           |    |            |    |
| VIII. Ropes & Knots<br>• Show that you can tie and know how the following are used:<br>➤ Bowline<br>➤ Two half hitches<br>➤ Sheetbend   |           |    |            |    |
| IX. Navigation<br>• Lay a compass trail<br>• Follow a compass trail   |           |    |            |    |
| X. Small Craft<br>• Learn the parts of a Kayak and paddle<br>• Learn to embark and disembark safely<br>• Be able to safely maneuver a kayak   |           |    |            |    |
|   | 1         | 2  | 3          | 4  |
|   | 5         | 6  | 7          | 8  |
|   | 9         | 10 | 11         | 12 |
|   | 13        | 14 | 15         | 16 |
|   | 17        | 18 | 19         | 20 |
|   | 21        | 22 | 23         | 24 |
|   | 25        | 26 | 27         | 28 |
|   | 29        | 30 |            |    |

## Patch Program

| Basic 10 Water Skills Level V  | LAST NAME |    | FIRST NAME |    |
|--|-----------|----|------------|----|
|  |           |    |            |    |
| I. Health & Safety <ul style="list-style-type: none"><li>First Aid Interest Project patch</li></ul>  |           |    |            |    |
| II. Swimming <ul style="list-style-type: none"><li>Survival Float or tread water for 5 minutes</li><li>Pass Intermediate swimming skill</li></ul>  |           |    |            |    |
| III. Weather <ul style="list-style-type: none"><li>Learn about tides and currents</li><li>What hazards they present</li></ul>  |           |    |            |    |
| IV. Water Life <ul style="list-style-type: none"><li>Two art forms that uses mediums from water environment</li><li>Discover two are forms that have water life as their subjects</li></ul>  |           |    |            |    |
| V. Communications <ul style="list-style-type: none"><li>Send and receive messages using any of the following:<ul style="list-style-type: none"><li>Buzzer, drum or flashing lights,</li><li>Morse code fag signaling</li><li>Semaphore flags</li><li>International code flags.</li></ul></li></ul> |           |    |            |    |
| VI. Conservation <ul style="list-style-type: none"><li>Learn about damage to the oceans, lakes or rivers by doing a clean-up project.</li></ul>  |           |    |            |    |
| VII. Water Sports <ul style="list-style-type: none"><li>Learn about snorkeling</li></ul>   |           |    |            |    |
| VIII. Ropes & Knots <ul style="list-style-type: none"><li>Demonstrate and know the uses for the following:<ul style="list-style-type: none"><li>Slip knot</li><li>Fisherman’s knot</li><li>Timber hitch</li><li>Belay a cleat</li><li>Reef knot</li><li>Figure eight knot</li></ul></li></ul>      |           |    |            |    |
| IX. Navigation <ul style="list-style-type: none"><li>Learn about aids to navigation and what they stand for.</li></ul>   |           |    |            |    |
| X. Small Craft <ul style="list-style-type: none"><li>Learn parts of a windsurf board and sail.</li><li>Be able to safely maneuver</li></ul>  |           |    |            |    |
|  | 1         | 2  | 3          | 4  |
|  | 5         | 6  | 7          | 8  |
|  | 9         | 10 | 11         | 12 |
|  | 13        | 14 | 15         | 16 |
|  | 17        | 18 | 19         | 20 |
|  | 21        | 22 | 23         | 24 |
|  | 25        | 26 | 27         | 28 |
|  | 29        | 30 |            |    |

## Patch Program

| Basic   | 10 Water Skills Level VI |           |
|---|--------------------------|-----------|
|   | FIRST NAME               | LAST NAME |
| I. Health & Safety<br>• Earn the First Aid & Safety Certificate   |                          |           |
| II. Swimming<br>• Pass American Red Cross “Basic Water Rescue” swimming skill level or equivalent.  |                          |           |
| III. Weather<br>• Know what a “small craft advisory” is.  |                          |           |
| IV. Water Life<br>• Learn about a career that involves water life.  |                          |           |
| V. Communications<br>• Teach at least one communication skill to younger Girl Scouts.   |                          |           |
| VI. Conservation<br>• Demonstrate to younger Girl Scouts the “Water Cycle”.   |                          |           |
| VII. Water Sports<br>• Teach level III their water sport activity – Boogie Boarding or<br>• Learn to play water polo.   |                          |           |
| VIII. Ropes & Knots<br>• Learn about Marlinspike.<br>• Learn and practice the following skills:<br>➤ Eye Splice<br>➤ Back splice<br>➤ Short splice<br>➤ Rope Grommet<br>➤ Needle Whipping<br>➤ Sewn Grommet |                          |           |
| IX. Navigation<br>• Learn Charting  |                          |           |
| X. Small Craft<br>• Learn the parts of a Sailboat<br>• Be able to safely rig a sailboat and know the points of sail.  |                          |           |
|   | 1                        |           |
|   | 2                        |           |
|   | 3                        |           |
|   | 4                        |           |
|   | 5                        |           |
|   | 6                        |           |
|   | 7                        |           |
|   | 8                        |           |
|   | 9                        |           |
|   | 10                       |           |
|   | 11                       |           |
|   | 12                       |           |
|   | 13                       |           |
|   | 14                       |           |
|   | 15                       |           |
|   | 16                       |           |
|   | 17                       |           |
|   | 18                       |           |
|   | 19                       |           |
|   | 20                       |           |
|   | 21                       |           |
|   | 22                       |           |
|   | 23                       |           |
|   | 24                       |           |
|   | 25                       |           |
|   | 26                       |           |
|   | 27                       |           |
|   | 28                       |           |
|   | 29                       |           |
|   | 30                       |           |