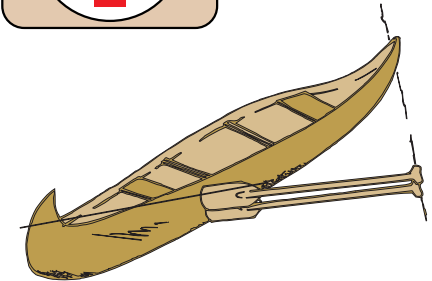
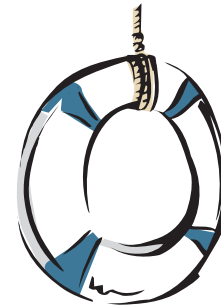
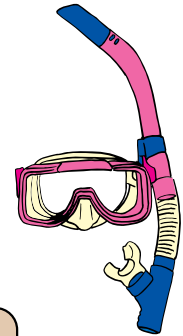
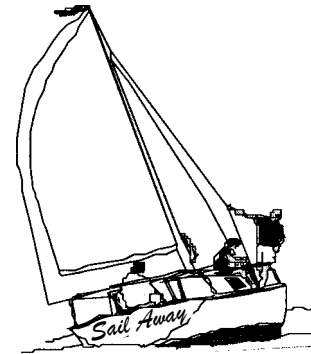
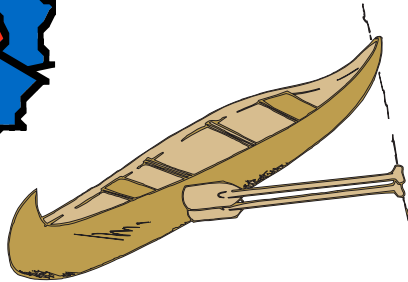
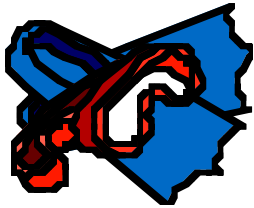
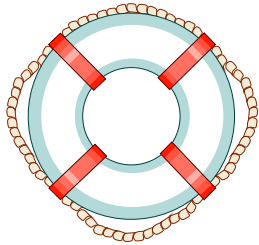
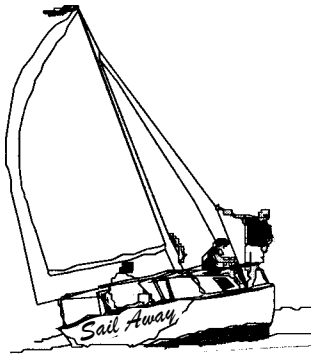


AQUATIC SAFETY UNIT

2003-2004



Each year, thousands of children are involved in water-related accidents. Many of these accidents could be prevented through proper aquatic safety instruction. Knowledge of how to avoid potentially dangerous situations and what to do during an emergency will help students and their families safely enjoy a variety of lifetime aquatic activities.

Special thanks go to Vicki Wilson and Judy Courtney of Henrico County Public Schools for believing in the value of this program; to Greg Florence for the creation of this program; to the YMCAs of Greater Richmond, their aquatic directors, and their instructors for their hard work and facility use; to Jim McNeal and Frank Hester of the Dive Shop for expert instruction and equipment use; and to the American Red Cross for their wonderful *Longfellow's Whales Tales* resource kit.

TEACHER EDITION
ANSWER KEY

12. Mr. Flo is at the pool and sees lightning. Ten seconds later he hears thunder. How many **miles** away is the storm? **2 miles**
13. You are in a raft at the neighborhood pond and you see lightning. Nine seconds later you hear thunder. How many **kilometers** away is the storm? **3 kilometers**
14. What can help you see things clearly underwater?
skin-diving mask
15. What can help you breathe without lifting your head up while snorkeling? **snorkel**
16. What piece of snorkeling equipment can help you move through the water like a dolphin? **fins**
17. When using a snorkel, be careful to blow out when water gets in. Otherwise you might **choke**.
18. If you are not a certified lifeguard, you should not go into the water to save someone. You should **“Reach or throw, don't go.”**
19. When using an extension or throwing assist to help someone, you should keep your body weight **low and back**.
20. Name three things you could use to save someone that are not actually made for rescuing people. **fishing pole, towel, shirt, pants, stick, water ski, cooler**
21. Name three common pieces of rescue equipment found around a pool. **rescue tube, ring buoy, reaching pole, heaving jug, shepherd's crook**

Personal Safety

There are two personal safety skills you should know if you find yourself in the water *without* a life jacket and you can't get out. If you use these skills, it is important to stay calm and not panic.

Survival Floating is a way for you to float in the water for a long time and save energy. Simply relax, stay calm, float on your back and breathe normally. If you can't float on your back, float on your stomach, lifting your head to breathe when needed. Stay calm and don't hold your breath for a long time.



Floating on stomach



Preparing to breathe



Lifting head to breathe

Using clothing as a life preserver:

If you find yourself in the water for a long time with clothes on, you can *disrobe* and make your pants into a life preserver to help you float. Remember to stay calm and survival-float while you take off your shoes, socks and shirt. When you take off your pants, tie the legs in a knot, zip up the fly and button the button. Fill the pants with air using the *underwater method* or the *over-the-head method*. Either way, once your pants are filled with air, they will help you float and save energy.

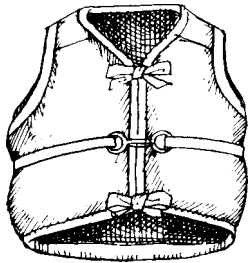
If you fall into cold water with a life jacket on, use the **HELP** position (*Heat Escape Lessening Posture*) to conserve body heat until help arrives. Hug yourself, bring your knees to your chest and keep arms flat against your sides.

Survival floating and disrobing are only used in emergencies when you don't have a life jacket. It would be a lot easier to save energy and stay calm with a life jacket on.

Life jackets should be worn whenever you are in a boat. There should be one for each person in the boat. If you are around water, especially cold water, and there is a possibility of falling in, you should wear a life jacket. ***Life jackets save lives, but they don't work unless you wear them, so be sure to wear yours!!***



Types of Life Jackets



Type 1 Life Preserver



8 Type 3 Special Purpose Device



Type 2 Buoyant Vest

Sample Test and Study Guide

1. If the captain of a boat asked you to look over the starboard side at the dolphins, you would be looking to the **right**.
2. If the captain of a sailboat asked you to go fore and help hoist the jib, you would go to the **front**.
3. When you canoe, one person sits in the **bow** and the other sits in the **stern**.
4. Port is where a ship loads its cargo and it's also the **left** side of a ship.
5. When boarding or debarking a boat, be sure to keep your weight **low** and toward the **center**.
6. You should steady yourself by grasping the **gunwales** when you get in or out of a boat.
7. If your boat or canoe capsizes, list two reasons why you would **not** stay with it. **fire, dam or waterfall**
8. You should wear this around water and have one for each person on the boat. **life jacket**
9. A way to save energy if you find you are in the water for a long time without a life jacket is called **survival floating**.
10. A way to conserve body heat if you are in cold water with a life jacket on is the **HELP** position.
11. If you find yourself in the water for a long time with clothes on, you can **disrobe** and inflate your **pants** to help stay afloat.

YMCA

Pool Rules and Regulations

1. No running or horseplay (i.e., pushing, dunking or throwing people in).
2. No gum, food, drink or smoking.
3. No glass containers in showers or pool area
4. Bathing suits are required. No cut-offs.
5. No diving.
6. Kick boards and pull buoys are for instruction and lap swimmers only.
7. Masks, fins and snorkels may be used by lap swimmers and during lessons only.
8. Only U.S. Coast Guard approved flotation devices are allowed during open swim.
9. Circle swim etiquette must be used when more than 2 lap swimmers are in a lane.
10. Youths under 10 years of age must be accompanied and supervised by an adult at all times.
11. No swimming without a lifeguard on duty.
12. The pool will close during thunderstorms.
13. The lifeguard has the authority to enforce these rules and to require those in violation to leave the pool.

How Close is the Storm?

To determine how close a storm is, count the number of seconds (one one-thousand, two one-thousand....) from the time you see lightning to the time you hear thunder. The light from lightning travels about 186,000 miles or 300,000 kilometers every second. The sound from thunder travels about 1,100 feet or 330 kilometers every second. *To estimate the distance to the storm in miles, divide the number of seconds between lightning and thunder by 5. To estimate the distance in kilometers, divide the number of seconds between lightning and thunder by 3.*

1. John is at the pool then he sees a flash of light. After 10 seconds, he hears thunder. How many miles away is the storm? **2**
2. Betty is swimming at the beach. She sees lightning and 15 seconds later hears thunder. How many miles away is the storm? **3**
3. Michelle is at a picnic in England when she sees a bolt of lightning. She hears thunder 12 seconds later. How many kilometers away is the storm? **4**
4. Greg is at the lake and hears thunder 24 seconds after he sees lightning. How many kilometers away is the storm? **8**
5. Kaydell is watching the Weather Channel and sees a thunderstorm warning for her area. The radar tells her the storm is 1 mile away. If she looks out the window and sees a flash of lightning, how long will she have to wait before she hears thunder? **5**

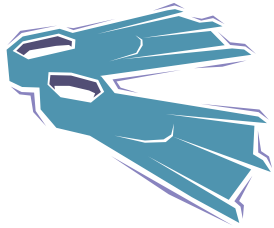
Snorkeling

Snorkeling, also known as skin-diving, is a fun aquatic activity. By using a mask, fins and snorkel, you can easily explore the underwater world. Before you start, it is important to know how to properly fit your equipment and how it works.

A skin-diving mask fits over your eyes and nose and allows you to see very clearly underwater. To check for a proper fit, put the mask up to your face without using the strap. Be sure your hair is out of the way. Breathe in through your nose. If the mask sticks to your face with suction, it's the right size for you.



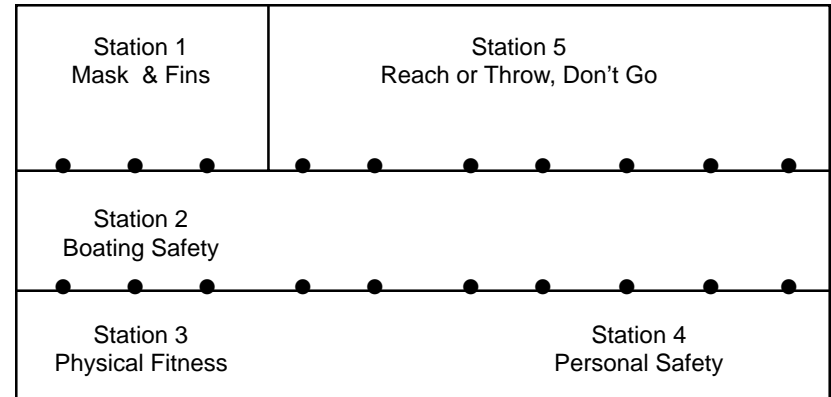
Fins make your feet like a dolphin's tail. By pointing your toes and kicking up and down, you can move quickly and smoothly through the water, just like a dolphin. You may kick with your feet together, or alternating. Fins come in different sizes just like sneakers. Just try a pair on and away you'll go!!



A snorkel is a hollow tube about 12 inches long with a mouth piece on one end. The mouth piece should fit comfortably in your mouth. The tube runs up the side of your face, past your ear and allows you to breathe without picking your head up out of the water. Be cautious when using a snorkel. If water gets in, blow hard out through your mouth before breathing in, or you may choke on some water.



Aquatic Safety Stations



These are the activities you will participate in at the YMCA. Be sure you review your booklet information before your trip.

1. **Snorkeling** - practice using a mask and fins to recover objects on the bottom of the pool
2. **Boating Safety** - practice boarding, debarking, paddling and capsizing a canoe
3. **Physical Fitness** - record a 10-second heart rate after various exercises in the water
4. **Personal Safety** - practice survival floating, using a life jacket in the HELP position and creating a flotation device with pants
5. **Reach or Throw, Don't Go** - practice reaching and extension assists, saving someone without getting in the water

Students who choose not to get wet may put on a mask, lie on the deck and look in the water. Board, debark and paddle a canoe. Debark the canoe before it is capsized. Perform exercises on the deck instead of in the water. Observe at the personal safety station and perform a variety of reaching and extension assists at station 5.

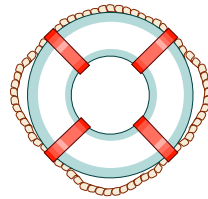
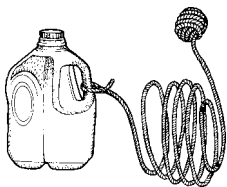
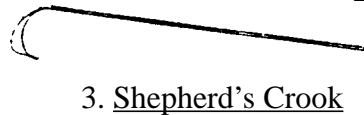
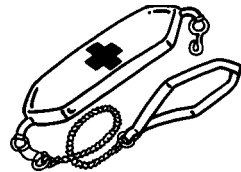
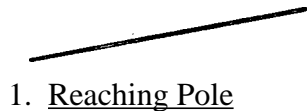
Reach or Throw, Don't Go!

The YMCA and American Red Cross offer classes that teach you the skills required to become a certified lifeguard. If you are not a certified lifeguard, you should *not* go in the water to help someone who is in trouble. You should **REACH OR THROW, DON'T GO!**

If you ever have to reach or throw, be sure to:

- talk calmly to the person
- keep your weight *low* and *back*
- brace yourself
- pull the person in slowly and gently
- make sure they are safe on the side

Pictured below are common pieces of rescue equipment found around pools, rivers, lakes and oceans. Do you know their names? If you don't, try asking someone you know who is a lifeguard, owns a pool, or works around water.



Reach or Throw, Don't Go!

If you see someone in the water who is in trouble, you don't need fancy rescue equipment before you can help. A lot of **common household items** can be used to help someone in trouble, without getting in the water. There are also many things around lakes, rivers, oceans and boats that can be used to help someone in trouble. See if you can use the following clues to fill in the blanks. There may be more than one right answer.

Don't forget!! Talk to the person, keep your weight low and back, brace yourself, pull him or her in slowly and make sure he or she is safe on the side.

1. At a neighborhood picnic, your friend (who can't swim) gets in the river over his/her head. You could empty the ice, food and drinks out of this, put the lid back on tightly, and throw it to your friend.

Ice Chest or Cooler

2. You and your friends are invited to go swimming in your neighbor's pool. What are you going to take with you that you could use to reach someone if they got in trouble?

Raft, Shirt, Towel, Pants, Gym Bag

3. A piece of equipment on a boat that could be used to help someone is a/an ***paddle, oar, ski rope, fishing pole, life jacket, seat cushion.***
4. You're on a camping trip. Your friend wakes up and goes down to the lake to wash his/her face. Your friend falls in and calls for help. You climb out of your nice warm _____, use it to extend your reach, and pull your friend to shore.

Sleeping Bag