**Strokes**

**Front Crawl**

The front crawl, sometimes called freestyle, is the fastest stroke.

![Diagram of front crawl](image)

**Body Position:** In this stroke, your body is prone and straight. However, the front crawl uses much body roll. With body roll, the whole body rotates, not just the shoulders.

**Breathing:** Most swimmers breathe each arm cycle (e.g., each time their right arm recovers out of the water). Turn your head to the side, keeping your opposite ear in the water. Remember to inhale as you turn your head and exhale through your nose and/or mouth between breaths (while your face is in the water).

**Kick:** The type of kick used in the front crawl is the *flutter kick*. In this kick, your legs are continuously moving with an up-and-down movement (one moves up while the other moves down through the water) that starts from the hip. While flutter kicking remember to keep the ankles loose and floppy.

![Diagram of flutter kick](image)

**Back Crawl**

The back crawl, also known as the backstroke, is the fastest stroke on the back.

![Diagram of back crawl](image)

**Body Position:** In this stroke, you lie on your back in a flat, streamlined, horizontal position. As in the front crawl, there is a lot of body roll. For most swimmers, the water line runs from the middle of the top of the head to the tip of the chin, with the ears under water.
Arms: Your arms move continuously in constant opposition to each other; one arm enters the water while one arm exits. This is called opposition rhythm and looks like a windmill.
Cue: “Thumb out (of the water), pinky in.”

Kick: The type of kick used in the back crawl is the flutter kick. The kick is like the flutter kick used in the front crawl but is a little deeper in the water. It is a continuous, alternating, up-and-down movement that starts from your hips. Remember to keep the ankles loose and floppy throughout the kick.

ELEMENTARY BACKSTROKE
The elementary backstroke uses symmetrical and simultaneous movements of the arms and legs.

Body Position: In the glide, your body is in a streamlined, supine position. Most swimmers keep their head submerged to the ears only, with the face always out of the water.

Arms: With palms flat against your hips, hands go up to the armpits, straight out to the sides and then whip out-stretched toward your body. Cue: “Monkey, Airplane, Squeeze” or “Little Bird, Big Bird, Flap” or “Tickle, T, Touch.”

Kick: The type of kick used in the Elementary Backstroke is the whip kick. With the whip kick, both legs bend at the knee and circle around in a kind of whipping action. Cue: “Down, Out, Around”

BREASTSTROKE
The breaststroke is the oldest known swimming stroke.
Cue: “Pull, Breath, Kick, Glide”

Body Position: In this stroke, the arms and legs move symmetrically. In the glide, your body is flat, prone, and streamlined, with legs together and extended.

Arms: With arms fully extended in front of you, begin pulling outward and back toward your body until your hands are nearly even with your shoulders. Then bring hands inward and together in front of your body as you extend the arms and reach forward.
**Kick:** The type of kick used in the Breaststroke is the *whip kick.* With the whip kick, both legs bend at the knee and circle around in a kind of whipping action. *Cue:* "Down, Out, Around"

**SIDE STROKE**

Body Position: In the side stroke, your body is nearly horizontal on its side. Your lower ear rests in the water close to your shoulder.

Arms: Begin in the glide stage, with arms outstretched and pointing toward opposite ends of the body. From here, the arms slowly come toward each other until they almost touch (between the navel and the armpit). Then both arms begin to extend again to the glide position they began in. *Cue:* "Pick an apple, put it in the basket."

**Kick:** The type of kick used with the side stroke is the *scissors kick.* From the glide position, legs together and straight, flex your hips and knees and draw your heels slowly toward your buttocks. From this position, move your top leg toward the front of your body and the bottom leg toward the back (until the top leg is nearly straight and the bottom leg is slightly flexed). Then press your top leg backward while extending your bottom leg forward.

**Butterfly Stroke**

Body Position:

In a prone position, the body moves in a constantly changing, wave-like motion in which it rolls forward through the water. The wave motion starts with the head and continues to the ends of the feet.

Arms:

- The Entry - finger tips enter water first, thumbs slightly down, and tips of elbows up and pointing outwards; extended hand in line with forearms best area of entry; somewhere in the region directly ahead of shoulders.
- The Catch - hands flat, fingers together or almost together wrist slightly flexed high elbow arms in front of shoulders, about shoulder width obtain a 'hold' in the water by pressing the hands out and around immediately after 'entry'.
- The Pull - resembles a crawl arm action performed with both arms simultaneously elevated, wrist flexed hands facing directly backwards at the same time near shoulder plane, hands sweep inwards towards central body plane both arms laterally in line hands at their lowest depth to face backwards.
- The Push - forearms and extended fingers inclined inwards towards each other, upper arms almost parallel with water surface push straight back at an angle away from hips.
- The Release - elbows still flexed and elevated hands in close proximity of hips, elbows leave water below hands, little fingers leading palm up position.
- The Recovery - elbow slightly flexed and elevated above hand arms lift completely out of water hands and arms kept straight throughout hands swing forward in a low arc.

**The Leg Action (Dolphin Kick):**

Both legs are extended, toes pointed and close to the surface of the water. The first down kick is after the arms enter the water; the second kick is during the last part of the arm pull and is twice as fast. The kick starts at the hips and makes the same whip-like motion as the front crawl. Bend the knees slightly through most of the downbeat and straighten them on the upbeat. Relax your ankles.
Terminology:
Surface dives- used to go under water when you are swimming on the surface. Can be either feet first or head first. Keep eyes open and arms above head when going down. 3 Surface Dives: Feet first, Pike, and Tuck.
Dolphin Kick- A swimming kick used mainly in butterfly in which the legs are extended straight back and moved up and down in unison with a slight bend in the knees on the upward movement.
Flutter Kick- A swimming kick in which the legs are held horizontal and alternately moved up and down in rapid strokes with little bend in the knee.
Scissors Kick- A swimming kick used only with the side stroke in which one leg is swung forward, the other is bent back at the knee, and then both are straightened and snapped together.
Whip Kick- Used in the Breast stroke and the Elementary back stroke. Both legs bend at the knee and the circle around.
Diving- a head first plunge into the water. Make sure to extend your arms with elbows locked alongside your head. Keep hands together with thumbs touching and palms facing toward the water.
Body Roll- A rotating movement of the body around the midline.
Emergency Action Plan- A action plan for responding to a water emergency. Should include: An emergency signal, locations of safety devices, and emergency procedures.
Personal Flotation Device(PFD)- A buoyant device, usually in the shape of a ring, belt or jacket, designed to keep a person afloat in the water. Also known as: life jacket or life preserver.
H.E.L.P.- Heat escaping lessening posture. A position that can increase the chances of survival by reducing the amount of body surface area that is directly exposed to cold water. The knees are brought up to the chest, face is out of the water, and the arms are at the side.
HUDDLE- much like the HELP position but with two or more people. With two people arms go around each other so chest are together. With three or more, put the arms over each other’s shoulders so that the sides of the chests are together. Child or elderly are sandwiched between adults.
Survival Float- face down in warm water only. Use this method if it is not possible to reach safety and it is necessary to wait for help or to rest and wait. Hold’s one breath and put the face in the water. Allow hands and legs to hang freely. To take a breath, slowly lift the arms to about shoulder height and move the arms forward. Separate the legs, moving one leg forward and one leg back. Gently press down with the arms and at the same time bring the legs together. This will allow the mouth to come above water.
Rescue Tube- A vinyl, foam-filled support used in making rescues (throwing assist, reaching assist, in water rescue).
Treading water- A skill using arm and leg movements to stay stationary and vertical with the head out of the water.
Sculling- A technique for moving through the water or staying horizontal using only the arms and hands.
Streamlined- A body position with hands on top of each other, arms straight, and legs straight together. This position moves through the water with the least resistance due to form drag.
Prone- On the front face down in water.
Supine- On the back, face up in the water.
Buoyancy- The upward force a fluid exerts on bodies floating on or submerged in it.

Self-rescue when not wearing a life jacket:
*Look for a log or anything that floats to help support you. Move as much of your body as possible out of the water. Keep face and head above water. Turn your back to the waves to keep water out of your face. Keep all clothing on, especially your hat if the water is cold. Try to inflate your clothing with air for floatation. Do not splash around to warm up in cold water. Swim only if you are close enough to shore safely. If clothed keep clothes on they help you float. If you can float wearing your shoes leave them on, if they are too heavy remove them. If you are wearing a long sleeved shirt or jacket try to trap air in the shoulders to help keep you afloat. If you are in warm water you can use your pants to help keep you afloat.

Self-rescue when wearing a life jacket:
*Always keep your face and head above water. Climb as far out of the water if possible onto debris etc. Keep all clothes on especially a hat. Even wet clothes maintain body heat. In cold water, you must decide between trying to reach safety or floating while waiting for help. If you choose to swim use strokes that keep your arms underwater such as the breaststroke or sidestroke. If you can’t reach shore in a few strokes, float in the HELP position and wait to be rescued.

Hypothermia: Is a life-threatening condition in which the body is unable to maintain warmth and the entire body cools. The temperature of your skin and the blood in your arms and legs drops quickly. You may lose the use of your hands and breathing maybe hard at first. The temperature of your brain, heart, and other vital organs gradually drops. Shivering can occur and you may become confused and disoriented. You may lose consciousness and heart failure could occur.

To protect yourself: Always wear a lifejacket, wear layers of insulated clothing that keep you warm even while wet. Clothing made of wool, or containing polypropylene or capalene. Avoid cotton t-shirts. Wear a wet suit or dry suit during aquatic activities. Wear a hat. Body heat is quickly lost through the head.

If you fall into cold water: Get out of the water, and get to a warm place. Remove wet clothing. Gradually rewarm your body by wrapping yourself in blankets or putting on dry clothes. Cover head to prevent further heat loss. Drink warm-nonalcoholic and decaffeinated liquids.