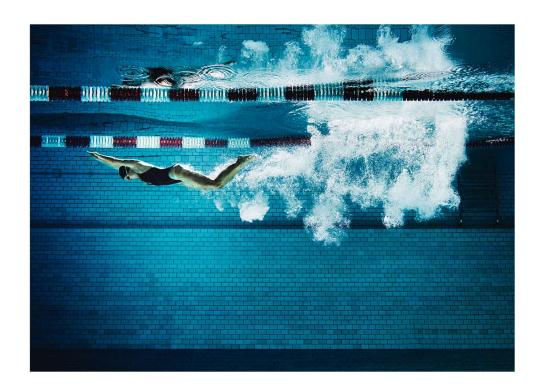
Drills To Help You Stay Afloat

Written by: Emily Epp

Date: January 2020



"The water is your friend...you don't have to fight with water, just share the same spirit as the water, and it will help you move."—Alexander Popov (RUS) Gold medalist and former WR record holder in the 50 free

Butterfly

• Body Position: Head is relaxed and in a neutral position. Head (not only eyes) should be facing the bottom of the pool at all times. Head down allows hips to rise up in the water. Core must also be tight to allow a straight body without wobbly hips.

- o Drills
 - Take a Bow goal is to tighten core and mimic hip movement in the water.
 - Surfs Up! goal is to glide on the water
- *Kick*: Kick always starts from the chest (not the Knees)! Dolphin kick, like how the animal demonstrates is a full body movement. Press down with the chest then let the rest of the body follow like a wave.
 - o Drills
 - Mermaid Swim goal is to mimic a "mermaid" in a whole body kick. These kicks will be much bigger than butterfly; however, will allow you feel the wave motion.
 - Small/ Large This drill mimics a real butterfly strokes (2 kicks at the top and bottom of the stroke). One kick is naturally smaller than the other.
- *Pull*: The pull starts at the top of the stroke. Start in streamline, pull hands apart (palms facing out), then scoop the water and rip it back until the arms exit the water. Arms should exit past the hips.
 - o Drills
 - Scull this is the small movement that starts the fly stroke.
 Practice this by keeping the arms fairly straight and pushing the water back and forth. There should be enough pressure on water to create small whirlpools following after an inward pull.

■ 3 scull/ 3 full strokes – the point of this drill is to apply the scull to the stroke. This drill should allow you to understand the feeling for the very beginning of the pull.

- Question Mark Drill Each arm should make a "question mark shape" in the water. Both arms do exactly the same movement (mirror movement).
- Rhythm: the rhythm is the hardest part of butterfly. Once the rhythm is found the stroke should feel powerful, graceful and "bouncy".
 - o Drills
 - Trampoline this requires pressing the chest down much farther than usual to exaggerate water compression. The goal is to press the water at an angle that has the water pushing you up and forward. The water can make the stroke easier, however finding the perfect angle takes a lot of practice.
 - 1 breaststroke/ 1 fly stroke during this drill be sure you are using dolphin kick the entire time. Breaststroke and butterfly have a very similar pattern, this drill gives a new perspective of the butterfly rhythm.



Backstroke

• Body Position: Backstroke, as its name implies, is done on your back, well more on the side. . . Head is back and tilted towards the ceiling (like your head is resting on a flat pillow). The neck should be relaxed and stretched (like someone is standing on your shoulders). The rest of your body is close to the water surface, if not right at the surface with a slight tilt at the legs so the legs are slightly underwater.

- Drills
 - **Kick on all 3 sides** the body is in a straight line from head to toes. Head should always be facing the ceiling (yes, when on your side as well!)
- Rotation: Backstroke is all about how you slice through the water. You are the smallest on your side and for that reason, in backstroke, rotation is key.
 However, only your body and hips rotate, your head DOES NOT MOVE!
 - Drills
 - Shoulder Roll Lay flat on your back, hand tightly at your side. Kick while slowly rotating your body left then right. This can be exaggerated by snapping your hips back and forth like it is done while swimming backstroke.
 - Shoulder Touch This is similar to shoulder roll. The difference is that now you are using your arms. Be sure your shoulders are touching your chin every stroke. Have caution that your chin (head) is not helping your body by also moving to meet your shoulder.
- *Kick*: Flutter kick involves small little alternating kicks. Toes should be pointed but also flexible. I often use the "paintbrush" metaphor. Your feet are the same as paintbrush. Kick starts at the hip (the handle) and finishes at the toes (the

bristles). All kicks must use even force up and down, do not play favourites when kicking, just like when painting a wall.

- o Drills
 - **Kick with a board** place the board over your knees and try to kick without disturbing the board.
 - **Kick with fins** the fins help put your foot in the proper position and demonstrates ankle flexibility.
- Pull: The arms have a straight arm recovery, but they also have a bent arm pull.
 When watching a backstroker underwater, their arms create a "V" shape,
 much like freestyle.
 - o Drills:
 - **Pulling on the lane line!** this puts your arms in a very similar, but not exact, position. This drill allows you to feel the bent arm pull.
 - Scull put your arm in the bent arm position and move your hand around slightly in scooping movements (wave to the Queen!). This is very slow!
 - 2 Lift keep one arm up by your ear while the other does half a stroke (point fingers straight to the ceiling) then bring that arm back down to your side. Finish this drill by doing another complete stroke to switch arms (think thumb out/ pinky in).



Breaststroke

• *Body Position*: keep body in a tight straight line with your body sloped slightly down so the kick does not end up above the water. Head should be facing the bottom of the pool at all times (yes, even when breathing).

- o Drills
 - **Streamline** feet pointed and together, arms above your head squeezing your ears.
- *Kick*: Whip kick is the most complicated kick as it is such an abnormal movement. Both legs must do the same movement as if they were mirroring each other. Both legs come "UP" to your glutes, "Out" to the sides (about hip width), then they "push" down and back into streamline. From a birds eye view, this kick should draw a heartish shape in the water.
 - Drills
 - "Up Down Around" complete all these 3 steps to whip kick pausing after each movement. This is slow; however, you can get a sense for each position involved in the kick. Use a kickboard for this drill.
 - 1 pull/3,2,1 kick 1 pull + 3 kicks (no breathing between), 1 pull + 2 kicks (no breathing between), 1 pull + 1 kick (normal stroke)
- Pull: the arms, like the legs, also create a heart shape from a birds eye view. The
 arms start in streamline, they then push out around shoulders width apart.
 Then pull your hips to meet your hands and immediately shoot arms back into
 streamline together. The arm movement is also a mirror image for both arms.
 - o Drills
 - **Scull** Very similar scull to butterfly. This movement starts the pull (*Note: Butterfly and breaststroke arms are very similar).

■ 3 scull/ 3 full strokes - this drill adds the mini sculls into the stroke and applies them to the pull. The scull is important to the setup of the pull. Without the scull, there is nothing to support the arms.

- "Shoot!" this drill tries to fix a common mistake. Swimmers usually wait for a second before shooting the arms back into streamline. The pause is supposed to be at the top of the stroke (in streamline). This drill involves a continuous motion from streamline, throughout the entire pull until the arms return to streamline. Shoot the arms forward.
- Rhythm: The pull starts the stroke and the kick follows immediately after. They do not happen at the same time. "Pull kick Glide."

Drills

- The Separation Drill Pull, kick, glide. These are the three basic parts of breaststroke. This drill breaks them up. Pause for a few seconds between every step. That way the stroke isn't rushed, and all components are finished fully before the next one starts.
- Glide 'till you stop do a complete stroke then glide until you are no longer moving. After you have completely stopped start fresh and complete another stroke. This works are the amount of power and momentum created by the stroke. As timing improves, so will the distance you travel between strokes.
- Accelerando start slow, like the first 2 drills above, and slowly speed up the tempo of every stroke following. This does not meet panic and do the steps poorly. Speed up the stroke until you cannot maintain proper form, then restart.

 Pullout: Breaststroke is the only stroke that includes a pullout. This happens underwater after a dive or a turn. A pullout is allowed ONE dolphin kick and ONE ONLY!

o Process:

- Start in streamline,
- Do one dolphin kick (optional),
- Then push palms out, like the start of a pull,
- Bring arms all the way down and past hips,
- Glide for around few seconds,'
- Then bring arms back into streamline keeping them close to the body to prevent drag, followed by a whip kick
- At this point you should be close to the surface of the water to start swimming.



Freestyle

 Body Position: Freestyle is an accumulation of body rotations, kicks and arm rotations completed on your front. This stroke involves slicing through the water on your side. Very rarely are you ever flat on your front. Body position starts in streamline and stays in a streamline position the entire time. The goal of the stroke is to be as narrow as possible.

Drills

- **Kicking on left and right side** keep your neck tall and body in a straight line as your kick on your side. Practice the pirate eye breathing (one eye in and one eye out. Both eyes are never out of the water at the same time). To do the "pirate eye," your head must be low in the water like your head is resting on a pillow.
- *Kick*: Flutter kick involves small little alternating kicks. Toes should be pointed but also flexible. (*Note: remember the "paintbrush" metaphor in the backstroke section).
 - o Drills
 - **Kick with a Kickboard** hold the base of the board so your body is still flat. This will allow you to focus on your legs alone.
 - Kick with fins the fins help put your foot in the proper position and demonstrates ankle flexibility.
- Pull: Freestyle pull is made up of 3 parts (pull, push, and the recovery).
 These things are all done in one smooth movement in the forwards motion.

o Drills

■ **Pull** – use a pull buoy between your legs to isolate your arms. This way you will get a chance to feel the movement of your arms without other distractions.

- 2 Lift leave the arm closer to the bottom of the pool straight by your ear, then have the arm above water bend until elbow is facing the ceiling and fingers are hovering above the water. Once in that position lower the upper arm and take another full stroke to switch arms. Completed on your side with face down!
- Shark fin This drill helps with the bent elbow positioning. Bring the arm that is closest to the bottom of the pool straight by your ear, then take the arm closer to the ceiling lift it up so your elbow is facing the ceiling and hand (fingers) are hovering above your hip. From the side it should look like a shark fin. Completed on your side with face down!
- Finger Drag as your swimming drag your fingers lightly along the surface of the water close to your body. This, also, helps with high elbow.
- Catch up Every stroke touch your other hand in streamline before starting the next stroke. This drill prevents "soldier" swimming.
- Rotation: freestyle rotation is what makes the stroke so "sharp." You
 want to, very literally, slice through the water without disturbing too
 much water.

o Drills

■ **Hip Touch** – While swimming, every time you take a stroke, cross your arm over your back and touch the opposite hip. This drill forces you to rotate your body.

- **Hip snap** While swimming, every stroke, quickly rotate your body. This movement should be quick and sharp. This will help give momentum to your rotation. During this drill it is normal for the arm rotation to also speed up as the hip snap relays on arm rotation.
- Twister This drill involves 5 strokes backstroke + 5 strokes freestyle repetitively over a distance. This drill practices rotation in a hidden way. Twister works the core muscles as your turn over from stroke to stroke. The goal is not to be wobbly when you switch, but rather tight and connected. The odd number of strokes all allows both sides of the core to be activated.

