

# Swim TO Stay Safe, Swim Safe

Stay, Play, and Learn at Home Swim: Intermediate to Advanced – Lesson Three

Today's Lesson: Sculling, Treading Water and Lifesaving Kicks

Build your swim terms knowledge base

**Sculling** 

Treading Water Arm Movement

Treading Water Bicycle Kick

Treading Water Coordination

Lifesaving Kick Eggbeater

Lifesaving Kick Inverted Scissor Kick

Swim Level: Intermediate-to-Advanced

Learn-to-Swim Levels: Preschool 2 to 4, Ultra 3 to 9, Youth and Adult 2 to 3

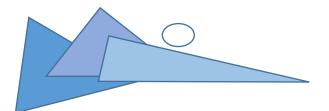
Safety Reminders: Caregivers should ensure that children are supervised and never left unattended in and around water. Adults and youth who practice any water activities should, also, have a buddy close by. Bathtub and shower safety measures should be adhered to at all times.

For all skills and drills, ensure that the area is free from obstruction and be aware of objects and people around you at all times. Caregivers should ensure that children are properly supervised at all times.

Remember that movement should be comfortable and should not cause any pain or discomfort in the joints or limbs. If discomfort is felt, please modify the movement so that it is comfortable for you. It is highly recommended to stretch prior to beginning any movement exercises.

# Knowledge Goal: Word Challenge

In addition to the four swimming strokes outlined in lessons one and two, there are additional strokes and kicks that assist swimmers to change direction, propel



themselves and remain at the surface in deep water. These skills are used in conjunction with floats and glides to maintain position and direction in the water while resting. They also assist swimmers in maintaining stability when carrying an object and during rescue situations.

Look online, choose from our resource page, or create your own word find, crossword or similar word game using some or all of following words

Sculling	Propulsion	Inverted scissor kick
Treading	Eggbeater kick	Whip kick
Surface support	Scissor kick	Water rescue

#### Swim Goal: Sculling

Sculling is a sweeping arm motion with the hands and forearms, similar to the paddles or oars of a boat. It is used to propel a swimmer by pushing water in a given direction.

Sculling is used in a variety of different ways within the water. It is often the first movement taught to help a swimmer understand the fundamentals of propulsion in the water.

#### How to Start:

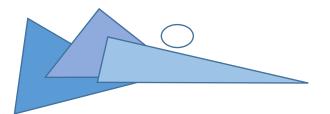
Complete as many activities below that match your comfort, age, and skill level or that of your child's.

# Materials:

- An area free from obstructions
- · Mat (optional)
- · Bathtub

# Steps:

- **1.** In an area free from obstructions:
  - a. Stand with arms relaxed at your sides.
  - b. Bend your elbows and slightly away from your body but with your hands slightly touching the sides of your body.
  - c. Point your fingers to the ground. Fingers are slightly apart, not cupped.
- **2.** Turn the palms of your hands on a slight angle to face outward, away from your body.



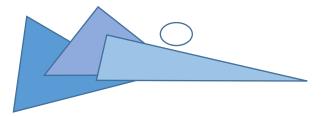
- **3.** Move your forearm and hands in an outward motion as if to push the air outward. Fingertips are pointed towards the ground
- 4. Stop once arms are about a foot away from the sides of your body.
- **5.** Turn the palm of your hands on a slight angle to face inward, towards the sides of your body.
- **6.** Move your forearms and hands inward, as if you are pushing the air in towards the side of your body.
- 7. Stop once your hands return to the starting position in step 1.

# Progressions:

- Work on ensuring that both arms are a mirror image of one another throughout the movement.
- Once you are comfortable with the base movement, try speeding up so that each sweeping movement lasts approximately one to two seconds.
- Practice the movement on the floor, on your back to mimic the proper body position if in water with arms and hands submerged.
  - During each sweeping movement, the side of your hand should keep in contact with part of the floor.
  - Ensure that your fingers are pointed toward your feet
- Practice the movement in a bathtub filled with water, lying on your back to get comfortable moving water.
  - Your arms should be submerged underwater, at your sides
  - Move the water in and out using the sculling arm movement.
- Repetition is the key to ensuring movements become more ingrained and your body is able to perform them more naturally. Repeat all movements at least 10 times before moving on to the next step or progression.

# Variations:

- For younger children or those that are not comfortable lying down in a bathtub, try sculling and moving the water while sitting up in the tub.
- Try the same arm movement, but change the position of your hands and observe how the water moves.
  - Lying on your back, point your fingers towards the ceiling and practice the sculling movement. In water you would move head first through the water as you push water towards your feet.



- Lying on your back, point your fingers towards the ground and practice the sculling movement. In water, you would move feet first through the water as you push the water towards your head.
- Try moving your forearms and hands in small circles outwards with fingers pointed towards the ground. In water, this would provide a foot-first movement through the water.
- Remember that children learn best through play. Use games and songs to encourage children to copy and interact with a caring adult.
- For older children, youth and adults, incorporate some knowledge principles to provide greater understanding. See below for some 'Did You Know?' tips and encourage the older learner to expand what they know about the science of swimming by visiting the library or looking online.

Sculling is the base arm movement for a variety of different swim skills and techniques. It is the arm movement in used to tread water, is often used as a recovery stroke for tired swimmers and is used to help rescuers manoeuvre during some rescue skills such as surface dives, reverse and ready, defenses and releases, as well as tows and carries.

# **Tips and Reminders**

Sculling should be done underneath the water, not at the surface. To get the best propulsion, arms and hands should be completely submerged.

The sculling movement should be slow, controlled and smooth. Fast and choppy movements will not push water effectively.

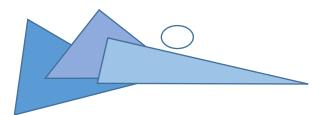
# Swim Goal: Treading Water Arm Movement

Treading water is a form of surface support used to keep a swimmers head above the surface while they are vertical in deep water. It combines the sculling motion of the arms and kicking motion of the legs simultaneously to accomplish this.

Let's work on developing the sculling arm movement first which is completed in front of the body and not by the side.

# How to Start:

Complete as many activities below that match your comfort, age, and skill level or that of your child's.



# Materials:

- An area free from obstructions
- · Chair

# Steps:

- **1.** Stand with your arms relaxed and by your sides.
- 2. Raise your arms out to either side so that you form a T shape. Your arms should be straight with your elbows, forearms and hands slightly lower than your shoulders
- **3.** Keeping your arms just below shoulder height, turn and angle your hands so that your palms face forward and slightly down. The thumbs should point upward towards the ceiling and the hands should be on a 45 degree angle.
- 4. Bend your elbows and in a sweeping motion with your forearms in front of you, push the air inward and bring your fingers together so that your fingertips touch in the middle by your chest. Your elbows should still be out to the sides in a T shape.
- **5.** Rotate your hands so that the palm of your hands are facing outward and slightly down. The thumbs should point down and the hand should be on a 45 degree angle.
- **6.** In a sweeping motion with your forearms in front of you, move your hands apart pushing outward on the air to return to the starting T position.
- 7. Repeat steps 2 to 6 multiple times.

# Progressions:

- Focus on doing smooth and controlled arm movements. Each sweeping movement should take about two seconds. Movement should not be fast and hands should push the air, not slice through it.
- Repetition is the key to ensuring movements become more ingrained and your body is able to perform them more naturally. Repeat all movements at least 10 times before moving on to the next step or progression.

# Variations:

- Remember that children learn best through play. Use games and songs to encourage children to copy and interact with a caring adult.
- For older children, youth and adults, incorporate some knowledge principles to provide greater understanding. See below for some 'Did You Know?' tips and encourage the older learner to expand what they know about the science of swimming by visiting the library or looking online.

Treading water allows a swimmer to maintain their head above water in a vertical position. Having your hands on a 45 degree angle, forces the water down when completing the sweeping motion, providing you the lift to stay up.

# **Tips and Reminders**

When treading, the arms and hands should be underneath the water in order to be able to push and pull the water effectively. The shoulders should be right at the surface. The palms of the hands should face the direction that the arm is moving.

# Swim Goal: Treading Water Bicycle Kick

The kick that is used when first learning to tread water is similar to the leg movement used while riding a bicycle and so is called the bicycle kick.

The advanced kick used for treading water is called the eggbeater kick, which we will learn later on in this lesson.

Now that we have learned the basic arm movement for treading water, we can introduce the leg movement.

# How to Start:

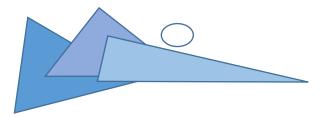
Complete as many activities below that match your comfort, age, and skill level or that of your child's.

# Materials:

- An area free from obstructions
- · Chair

# Steps:

- **1.** Sit in a chair with your feet on the floor.
- **2.** Starting with your right leg, begin making circles up and down:
  - a. With your knee bent and foot slightly flexed, lift your right foot off of the floor.
  - b. In an upward motion, kick that foot out in front of you. Extending your leg so that it is straight.
  - c. Point your toes slightly and then begin bending your knee.
  - d. In a downward motion, drop the lower part of your leg so that your foot returns to the starting position and is back on the floor.



- e. The entire motion should make a circle where your hip, knee and ankle are in line with each other.
- **3.** Repeat with the one leg until comfortable and then try the same exercise with the left leg.

# Progressions:

- Once you are comfortable moving each leg independently, practice moving both legs together.
- Then practice alternating the movement between each leg. First make the circle with your right leg and then with your left. The complete leg movement should look like you are pedalling an imaginary bicycle.
- As you become more comfortable, speed up the movement and focus on making smooth and controlled circles.
- Repetition is the key to ensuring movements become more ingrained and your body is able to perform them more naturally. Repeat all movements at least 5 times before moving on to the next step or progression.

# Variations:

- Have younger children pretend they are riding a bicycle.
- · Practice riding an actual bicycle to demonstrate the proper leg movements.
- Remember that children learn best through play. Use games and songs to encourage children to copy and interact with a caring adult.
- For older children, youth and adults, incorporate some knowledge principles to provide greater understanding. See below for some 'Did You Know?' tips and encourage the older learner to expand what they know about the science of swimming by visiting the library or looking online.

# Did You Know?

Flutter kick and eggbeater kick are other common leg movements used to support the vertical position when treading water. The bicycle kick provides an easy reference for most and uses less energy than the flutter kick.

# **Tips and Reminders**

While moving your legs, make sure that your legs stay relaxed and that hips, knees and feet stay in line with each other. Legs should be close together, not wide and far apart.



# Swim Goal: Treading Water Coordination

Treading water involves moving your arms and legs to keep your body upright and your head above water. It is considered one of the most important swim survival skills that a beginner swimmer should know.

While treading water, your arms will scull moving in and out while your legs kick, moving up and down as if you are riding a bicycle.

#### How to Start:

Complete as many activities below that match your comfort, age, and skill level or that of your child's.

#### Materials:

- An area free from obstructions
- · Chair

# Steps:

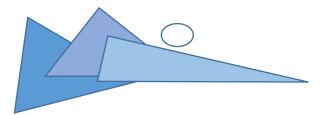
- **1.** Sit in a chair with your feet on the floor.
- **2.** Begin moving your legs as if you are riding an imaginary bicycle. Move each leg independently in a circle, alternating right leg and then left.
- **3.** While continuing to pedal the imaginary bicycle, bring your arms out to either side to form a T shape and then begin the sculling motion.
- **4.** Forearms and hands should move in and out, in a sweeping movement, with palms facing the direction of movement and the hands at a forty five degree angle.
- **5.** Arm and leg movements should be are done at the same time.

# Progressions:

- Try the movement while standing. Begin by running in one spot slowly with your knees high as you move your arms in and out in the sculling motion.
- Repetition is the key to ensuring movements become more ingrained and your body is able to perform them more naturally. Repeat all movements at least 10 times before moving on to the next step or progression.

# Variations:

 In the water, equipment can be used to help swimmers stay afloat while learning to tread. Try it wearing a lifejacket, PFD or sit on a pool noodle for support with a supervising adult within arms' reach or an alert buddy for youth and adults.



- When first trying it in the water, start in the shallow end at a depth where the water is at chest level. Make sure you are close to a wall or close to a support person in case you need help. As you become more comfortable, move to deeper water.
- Remember that children learn best through play. Use games and songs to encourage children to copy and interact with a caring adult.
- For older children, youth and adults, incorporate some knowledge principles to provide greater understanding. See below for some 'Did You Know?' tips and encourage the older learner to expand what they know about the science of swimming by visiting the library or looking online.

Most people are able to float vertically in the water, without moving, as long as they are fully relaxed. Tense or clenched muscles are denser and can cause you to sink

It is possible to stay afloat using only the sculling arm movement or the bicycle kick movement, eggbeater for advanced swimmers. This allows you to use your arms while keeping your head above water or even to stay afloat in case of a leg injury.

The importance of being able to keep your head above water, to call for help, in a survival situation cannot be underestimated.

# **Tips and Reminders**

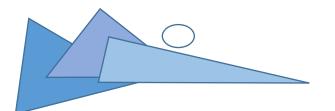
Treading water is a resting skill. Swimmers should be relaxed and comfortable while their head is above the water. Staying calm and relaxed will help conserve your energy.

# Swim Goal: Lifesaving Kick Eggbeater

Lifesaving kicks are those that have proven most effective at stabilizing the swimmer in water and are commonly used in rescues.

Eggbeater is the lifesaving kick that allows greater stabilization of the upper body. It is used while treading water during rescue situations to perform rolls, tows and carries. This kick gets its name because the legs move in alternating horizontal circles like an old fashioned eggbeater.

We start off learning eggbeater by focussing on one leg at a time, then coordinating the movement with the alternating kick on the other leg.



# How to Start:

Complete as many activities below that match your comfort, age and skill level or that of your child's.

#### Materials:

- An area free from obstruction
- · Chair

# Steps:

- **1.** Sit in a chair on the edge of the seat, with your feet on the floor. Move your feet and knees apart so that you are sitting with your legs open in a V shape.
- **2.** Starting with your right leg, lift it off the ground with your foot flexed.
- **3.** With your knee bent at ninety degrees begin drawing a circle inward, counter clockwise, with your lower leg and foot. Your upper leg and knee should remain in a stationary position and do not move.
- **4.** Repeat this motion with your right leg several times until comfortable.
- **5.** Once comfortable, repeat steps 2 to 4 with your left leg. Your left leg should move clockwise instead of counter clockwise.
- 6. After you have mastered both legs independently, try both legs at the same time.
- 7. Then try to alternate the movement.
  - a. Start off by rotating your right leg inward to form a counter clockwise circle. As your lower leg begins to circle outward, start circling your left leg clockwise inward, into the centre.
  - b. When one leg is in, the other is out
  - c. Keep alternating the legs right and then left, keeping your feet flexed.

# **Progressions:**

- Try using eggbeater instead of the bicycle kick while treading water. In a chair, add in the treading water arm movement while you rotate your legs in the alternating circles.
- Repetition is the key to ensuring movements become more ingrained and your body is able to perform them more naturally. Repeat all movements at least 10 times before moving on to the next step or progression.

# Variations:

- In water, equipment can be used to help swimmers stay afloat while learning to tread. Try it wearing a lifejacket, PFD or sit on a pool noodle for support with a supervising adult within arms' reach or an alert buddy for youth and adults.
- · In water, try eggbeater on your back and then on your front.



- Changing your position changes the direction that you are swimming.
- Remember that children learn best through play. Use games and songs to encourage children to copy and interact with a caring adult.
- For older children, youth and adults, incorporate some knowledge principles to provide greater understanding. See below for some 'Did You Know?' tips and encourage the older learner to expand what they know about the science of swimming by visiting the library or looking online.

Eggbeater kick is one of the most powerful lifesaving kicks due to the continuous movement of the legs which provides continuous support since there is no break in the kick. When performed correctly, it allows you to lift your upper body out of the water without swaying allowing your arms to move freely so that you can hold or move other objects.

Rescuers rely on this kick to do spinal rollovers and to tow or carry victims through the water to safety where it is important to maintain stability for both the rescuer and the victim.

Water polo players rely on the eggbeater kick throughout their games to allow them to move, defend, and throw the ball at the net.

# **Tips and Reminders**

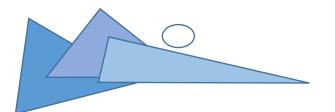
The circular motion of the eggbeater kick is always an inward motion. Legs should always rotate in towards the centre first and not out to the sides. Right leg counter clockwise and left leg clockwise.

Feet should always remain flexed for a more effective push and pull of the water and to stabilize the knees in its bent position.

# Swim Goal: Lifesaving Kick Inverted Scissor Kick

Another kick rescuers rely on to tow or carry a victim to safety is the inverted scissor kick. This kick is similar to the scissor kick learned in Beginner Lesson Four with side glides.

Inverted scissor kick enables rescuers to face their victim while swimming beside them.



# How to Start:

Complete as many activities below that match your comfort, age and skill level or that of your child's.

# Materials:

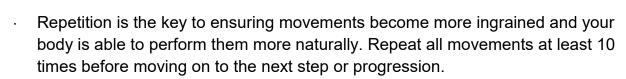
- · Area free from obstructions
- Mat (optional)

# Steps:

- **1.** In an area free from obstructions, lie down on the floor on your right side. Your body should be straight with legs together.
- **2.** Prop yourself up on your right elbow or extend your arm straight and rest your head on your upper arm (bicep).
- **3.** While lying on your side, begin the kick by flexing your feet then bending both knees at the same time. Bring your legs up together towards your chest into a tuck position.
- **4.** From the tuck position on your side, move your upper left leg backwards, while keeping the lower right leg tucked in the same position. Your legs will separate forming a V shape or lunge position. Both knees should still be bent.
- **5.** While still on your side, extend both of your legs out straight and point your toes, while keeping the V shape with your legs. The right leg (closest to the floor) should be forward and the left leg back.
- **6.** Bring your legs back together in a sweeping motion and return to the starting position, the glide position, to complete the kick. The final kick movement resembles scissors closing.
- **7.** Roll onto your left side and repeat the exercise, steps 1 to 6. This time the left leg will go forward and the right leg will go back.

# Progression:

- Focus on making the movement smooth and controlled. The legs should move in a forward and backward motion with legs touching during the kick and glide portion.
- Focus on the timing of the kick. The tuck and V position will be slower movements, but similar to the whip kick there should be some power in the final scissor movement of the kick. The knees should not open up.
- Focus on the glide. Do the full kick movement and then hold the glide position for three seconds before repeating.



#### Variations:

- Try scissor kick instead. In scissor kick the direction the legs move is opposite the inverted scissor kick. The top leg moves forward and the bottom leg (closest to the floor) moves back.
- Remember that children learn best through play. Use games and songs to encourage children to copy and interact with a caring adult.
- For older children, youth and adults, incorporate some knowledge principles to provide greater understanding. See below for some 'Did You Know?' tips and encourage the older learner to expand what they know about the science of swimming by visiting the library or looking online.

# Did You Know?

Each swimmer usually has a dominant side where the kick will feel most comfortable. Try both sides to see which you prefer.

The inverted scissor kick, which has the leg closest to the surface of the water move backward instead of forward, allows a swimmer to face their victim during a rescue as the bottom leg kicks under the victim.

#### **Tips and Reminders**

For maximum propulsion the legs should always remain fully submerged underwater.

Remember to practice both sides for body balance and in survival situations it will allow you to switch sides when tired.

# Next Lesson: Stride Jumps, Dives, Reverse and Ready, Object Recovery

Treading water and lifesaving kicks are key skills to know in swim survival. Look for our next lesson where we work on entries into water, recovering objects from the water and ways to approach a rescue situation in a safe manner, key skills on learning to help those who may find themselves in a swim survival situation.

Continue to follow us on the path to learning how to swim.