The Basics: Ready Position and Simple Streamlines

- Lesson 0: Ready Position
 - We use this for every set that starts in the water
 - o Ready Position | GoSwim
 - o Teaching Ready Position and Pushoff Ready Position Pu | GoSwim
 - The ready position is a great way to push off and to start to reinforce how you'll be leaving the wall from your breaststroke and butterfly or open turns.
 - Hold on to the wall with one arm, and your feet on the wall just below the hips.
 - The body will be turned sideways
 - The feet and knees are pointed up at 45-degrees
 - One arm is outstretched toward the other end.
 - The outstretched hand should be held palm up at this point.
 - Find the position that's the most comfortable for you, without too much strain on the hand on the wall.
 - o Push off in streamline
 - Lift of the body using the hand that's on the wall
 - Swipe up with the extended hand to help the body fall to the correct position.
 - Bring the wall hand forward, past your ear, to meet your underwater hand
 - Lock the hands in streamline position, and
 - Jump off the wall on your side
 - Slowly rotate to the front or back, depending on the stroke.
- Lesson 1: Streamlines
 - o This is the MOST important skill in all of swimming
 - o All-Strokes Simple Streamline | GoSwim
 - Lock your hands
 - Place one hand on top of the other and wrap the thumb of the top hand around the side of the bottom hand.
 - Squeeze your shoulders and arms tightly against your head.
 - Squeeze your arms very tightly against the head, behind the ears.
 - Once you know what your hands and arms are supposed to do, get in the pool, drop down, and push off with your hands in this position.
 - Drop down and push off, locking one hand overtop of the other by wrapping the thumb from the top hand around the side of the underneath hand.
 - Get the hands locked before you leave the wall.
 - Push off and rotate to your stomach (this is a drill for swimmers to learn how to control the rotation, not a rule of where you'll rotate to when swimming).
 - Hold and glide until your body rises to the surface.
 - o Repeat... forever.

- o Learning how to control your body is the real goal of this drill.
 - Staying parallel to the surface of the water from fingertips to toes, and having the body rise to the surface IN that line.
 - Swimmers will focus on staying level, while using small adjustments from the feet.
 - You have to know this scrubs off speed, and should be avoided.
 - It will be better to go off balance than to rely on using the feet to stabilize, until you learn how to use the imperceptible adjustments made with the core to keep you steady.
 - Stay locked from head to toe, and you'll be ready to start adding movements that will be more effective.

Underwater Body Dolphin Drills

- Approach #1 from GoSwim
 - Lesson 1: Front Slow Fast Back
 - Step 1 Front Slow Fast Back | GoSwim
 - Find deep water, on your side
 - You're not going to move too far forward, but you may float up.
 - The goal is to try to get 3-5 sequences done prior to floating to the surface.
 - In a streamline position on your side, totally underwater.
 - Pivot at the hips, very limited bend in the legs.
 - Fold your body at the hips slowly forward with upper and lower body creating a forward V.
 - As hard as you can, take the arms and legs BACK to full movement in a U shape... hold.
 - Make sure you don't tuck the chin or move the head independently on this.
 - Keep everything locked in and activate the lower back and ab muscles for all movements.
 - o Emphasize that a dolphin kick is backwards too
 - Repeat as many times as you can until you either float to the surface or need some air.
 - You'll have very little movement in this exercise.
 - Focus on ALL movement coming from the core and remember, limit the bending of the knees.
 - Also make sure your head is locked between the arms.
 - o Lesson 2: Back Slow Front Fast
 - Step 2 Back Slow Front Fast | GoSwim
 - Find Deep Water, on your side
 - You're not going to move too far forward, but you may float up.
 - The goal is to try to get 3-5 sequences done prior to floating to the surface.
 - In an opposite action from the first step, on your side and fully underwater.
 - In the tight streamline position, take the arms and legs BACK as far as you can (slowly), and hold for a brief moment.
 - Now, pivot at the hip joint forward, bringing the arms and legs to a V position with force.
 - Floppy Ankles
 - Hold in that position for a moment, the slowly and controlled, take the arms and legs back to the U position with the arms and legs behind the torso.

- Keep knee bend to a minimum and activate the core to bring the arms and legs forward.
- This is like a V-Up underwater on your side
- Lesson 3: Back Fast Front Fast
 - Step 3 Back Fast Front Fast | GoSwim
 - Find Deep Water, on your side
 - Using the maximum range of motion, take the arms and legs
 BACK as far as the start position in step 2, and then bring the arms and legs FORWARD as far as the start position in step 1.
 - Floppy Ankles
 - They can say "U V U V"
 - Repeat this motion to keep the knee bend to a minimum and keep the head locked between the arms.
 - Activate the abs for the crunch forward and the lower back for the backward movement of the arms and legs.
 - The key point here is to make the forward and backward movement as big as reasonably possible.
- o Lesson 4: Repeat Lesson with Rate
 - Step 4 Repeat Step 3 with rate | GoSwim
 - Find Deep Water, on your side
 - Lesson 4 is a series of Lesson 3 repeats, with the rate increasing.
 - First, start with something slower than the athlete wants to do.
 - Have the athlete match the forward and backward sweep of the arms and legs with a slow rhythm.
 - They can say to themselves FORWARD BACKWARD FORWARD BACKWARD.
 - o Or they can say "U V U V"
 - We want to start the process by making sure they know it's NOT just a forward kick, it's both sides of the kick.
 - We will now gradually increase the rate by decreasing the time between kicks with the swimmer continuing to repeat FORWARD BACKWARD.
 - Keep increasing the rate by decreasing the time between kicks.
 - The focus is STILL the FORWARD BACKWARD movement by the athlete and trying to get the MAXIMUM amplitude within the allowable rate.
 - Continue to increase the rate until the athlete may have to change the mantra to FRONT BACK to keep up.
 - Again, try to get as much amplitude or forward and backward movement within the rate.
 - The final rate is as fast as they can go.
 - Finding the breaking point, or rate where we don't grab as much water, helps us to determine the best rate for the athlete.

- Don't be afraid to push this to the limits. You could be surprised at what's possible.
- Lesson 5: Snake Drill to Race Body Dolphin
 - Find Deep Water, on your side
 - Do the Snake Drill
 - Snake Drill | GoSwim
 - Use the rate with which you were most comfortable in Lesson 4
 - Snake down the pool with the largest amplitude possible
 - Next, try to keep the amplitude in the body while reducing the amplitude in the hands
 - Push the hands forward with each movement, not up and down
 - Lead the movement from the chest, not the hands.
 - Now try race pace body dolphin
 - Push off in perfect streamline
 - Push hands forward with body doing U V U V
 - Floppy Ankles
- Approach #2
 - o Lesson 1: Think Like a Dolphin
 - Drill 1: Vertical Dolphin Kicks
 - Start with arms crossed on chest
 - Then put hands out of the water
 - Then try to do it in a streamline position
 - Engage your core by starting the flow of your dolphin from the chest
 - Drill 2: Vertical Push-offs from the Bottom
 - Bounce off the bottom and get as high out of the water as you can using only dolphin kicks
 - o Lesson 2: Surface Body Dolphin
 - Drill 3: Head Lead Body Dolphin on the Surface
 - Press with your chest and allow the rest of the body to flow along
 - Make your chin go forward as you press with your chest
 - Look down as you release your chest
 - Try not to kick to hard use body motion to move you forward
 - Allow everything to flow through one hole in the water
 - Flow just above and just below the surface of the water
 - When you need to breath, fit the breath into the body rhythm
 - Drill 4: Head Lead Body Dolphin on Back
 - Drill 5: Hand Lead Flow on the Surface

- Hands forward
 - o Try to "float" your hands on the surface
 - Your hands should go no lower than 6" below the water
- Keep your hands in front of your body rather than in a tight streamline
- Stay shallow and send your fingertips and energy forward rather than up and down.
 - o Maintain a steady rhythm with your body
- When you breath, fit it into the rhythm of your body
 - Simply press in on your chest and release your head up for air
 - o Try not to press your hands down or take a stroke
 - Keep your breath low and right at the surface
- Drill 6: Hand Lead Flow on Back
 - Spear with the fingertips, don't let your hands go up and down
 - Don't let your knees break the surface too much
 - Don't let your hips sink to much
- o Lesson 3: The Underwater Body Dolphin
 - Drill 7: Head Lead on your stomach
 - Drill 8: Hand Lead on your back
 - Drill 9: Hand Lead on your stomach
 - Drill 10: Hand Lead on your back
- Lesson 4: Finding the Right Side
 - Drill 11: 360 Dolphin Rotation
 - Push off your stomach and body dolphin
 - Rotate 90 degrees and body dolphin
 - Repeat for 360 degrees
 - Try to find the angel at which you are most comfortable
 - Drill 12: Engage Your Hips
 - Finally, Body Dolphin in your preferred position and really try to engage your hips and core
 - Do not move your hands up and down
 - Feel the body dolphin movement start has high in your core body as possible
 - But not your head and hands!

Freestyle/Backstroke Drills

- Lesson I Freestyle/Backstroke: Find your "Sweet Spot"
 - Free and Back are swum on your side, with balance
 - Drill 1: Basic Balance
 - Look @ bottom
 - o Chest down, hips up
 - o Feels like a sliver of water could go across the back of your head
 - o Relaxed and stable
 - o Gentle kick in shadow of body
 - Drill 2: Balance on Back
 - Just a sliver of your face above the water
 - o Feels like holding an apple under your chin
 - o Lean on upper back until hips rise
 - o Gentle kick in shadow of your body
 - Drill 3: Side Balance Find your "sweet spot"
 - o Start on side, with face in the water and hands at sides until balanced
 - o Rotate face out of the water
 - Hide face and show arm
 - Only a sliver of your face is above the water
 - Your hand on hip whole arm above the water
 - Kick in the shadow of your body
 - o Imagine:
 - Imagine being towed by a line out of the top of your head
 - Imagine a cup of coffee on your shoulder and on your forehead
 - Think tall! Keep as long and straight as possible
 - o Any tension or unease not the "sweet spot"
 - Don't tilt chin or crane neck to breath
 - Lesson II Back/Free roll
 - o Drill 4: Back roll
 - Roll on back from "Sweet Spot" on one side to the other side
 - Imagine a cup of coffee on your shoulder and forehead
 - Smallest possible wake
 - If you wander, your head and spine are not aligned
 - o Drill 5: Front roll
 - Roll like a log
 - Head down
 - Pause
 - Mentally rehearse rolling head, torso, hips as one unit
 - Roll head, torso, hips together "like a log"
 - Find new "sweet spot"
 - Imagine you are fitting through a narrow tube
 - Imagine you are breathing with your belly button
 - Lead with your core, not your head

- Stay perfectly horizontal
- Economy of movement
- Drill 6: Full Circle roll
 - All elite swimmers can do this
 - Roll on back (Drill 4)
 - Find Sweet Spot pause
 - Stay in sweet spot until perfectly balanced
 - Look down pause
 - Roll head, torso, hips like a log
 - Find new sweet spot pause
 - Stay in sweet spot until perfectly balanced
 - Do it Clockwise for one length, counterclockwise for another
 - Alternate clockwise then counterclockwise
 - If you are wandering in the lane, your head and spine are not aligned
 - Imagine a rope attached to the top of your head pulling you along
 - Stay slippery
- Lesson III Lengthen Your Vessel
 - Drill 7: Hand-Lead Sweet Spot
 - Find your sweet spot
 - Sneak your arm up to an extended position underwater
 - Little or no gap between your arm and the back of your head
 - Fingertips to toes as straight and long as possible
 - o Drill 8: Kicking the Skate Position
 - Start in your hand-lead sweet spot
 - Swivel head to look down
 - Hide head (a small amount of water should feel like it could roll across the back of your head
 - Shoulder straight up
 - Get the sensation of swimming down hill
 - Long!
 - Drill 9: Shark-fin
 - Use this process
 - Find your hand-lead sweet spot
 - Move to the skate position
 - Move top hand up to shark fin position
 - Return hand to hip
 - Back to hand-lead sweet spot (look up)
 - Repeat
 - Elbow should be directly above shoulder
 - Eliminate all tension in the recovery arm
 - Let your hand flop
- Lesson IV Switch
 - o Drill 10: Stop-Stop-Switch
 - How:

- Find your hand-lead sweet spot (face-up)
- Look down and pause
- Stroke thru Shark fin and roll to opposite side
- Immediately find hand-lead sweet spot on opposite side
- Don't switch hands until they are both together out front
- Roll like a log head, shoulders, and hips together
- Switch (shift weight) quickly
- Imagine sliding your hand into a sleeve with your body following and not touching the sides
- Think slippery
- o Drill 11: Triple Switch
 - Add two switches (three strokes total
 - Don't switch until both hands are together out front (front-quadrant swimming)
 - Head down during switches, but back to sweet spot after third switch
 - Imagine in-line skating shift weight quickly from side-to-side
- o Drill 12: Balanced Breathing
 - Skate Position
 - Roll your head to air to Hand-lead Sweet Spot
 - without moving your lead hand!
 - Head on the pillow bottom ear down and underwater, chin high
 - Focus all attention on the lead hand
 - Do NOT move your lead hand
 - Switch sides
- o Drill 13: Catch-up Drill:
 - Swim like Triple Switch, but don't find sweet spot after every other stroke
 - Don't cheat on the catch-up
 - Breath during body roll don't turn your head
- o Drill 14: Cheatin' Catch-up Drill:
 - Do the Catch-up Drill, but you can cheat a very small amount
 - This is called "Freestyle"
- o Drill 15: Cheatin' Catch-up Drill with One-Google Breathing
 - Do the Cheatin' Catch-up Drill and breath every 3rd stroke
 - Focus on the lead hand do NOT move it
 - Keep one google in the water
 - Keep your eyes open so you can see both above and under the water
 - Breath quickly
 - Roll your head with your body and return you head to water before your hand enters
 - Again, focus all your attention on the lead hand so it doesn't move
 - Do NOT push down when you take a breath!
- o Drill 16: Single Arm Freestyle
 - Use this process

- Find your hand-lead sweet spot
- Move to the skate position (head down)
- Stroke with one arm thru the shark fin position
- Roll back to hand-lead sweet spot on same side
- Opposite hand remains at your side the whole time
- Roll completely to other side during stroke and get power from body roll during pull
- Slippery!
- Lesson V Backstroke
 - Drill 13: Kick in the Shadow of your body
 - Start on your back with your hands to your side
 - Push you back down and your hips up
 - Water level around your face
 - "Apple" under your chin
 - Kick in the shadow of your body
 - From the hips
 - Don't bend your knees too much
 - Let your ankles flex like flippers
 - Try to "boil" the water at your feet
 - Drill 3: Side Balance Find your "sweet spot"
 - o Start on side, with face in the water and hands at sides until balanced
 - o Rotate face out of the water
 - Hide face and show arm
 - Only a sliver of your face is above the water
 - Your hand on hip whole arm above the water
 - Kick in the shadow of your body
 - o Imagine:
 - Imagine being towed by a line out of the top of your head
 - Imagine a cup of coffee on your shoulder and on your forehead
 - Think tall! Keep as long and straight as possible
 - o Any tension or unease not the "sweet spot"
 - Don't tilt chin or crane neck to breath
 - o Drill 14: Single Arm Backstroke
 - Do the active balance drill first to refresh on backstroke roll
 - How:
 - Start in sweet spot
 - Stroke with one arm
 - "Roll, Roll, Roll, Stroke, Roll, Roll"
 - Finish the stroke behind your butt with the shoulder with which you are stroking pointing straight to the ceiling
 - Count to two
 - Stroke again with same arm
 - Fine points:
 - Show both shoulders shoulder out of water before hand
 - Rock steady

- Thumb out first, pinky in first
- Reach for the ceiling on recovery
- Teach S-pull and repeat drill
- The key: finish the pull behind your butt finish your roll before you finish your underwater pull
- o Drill 15: Alternating Single Arm Backstroke
 - Use this process
 - Same as Drill 14
 - 2 strokes with right arm
 - 2 strokes with left arm
 - "Roll, Roll, Roll, Stroke, Roll, Roll, Stroke, Roll, Roll, Roll, Stroke, Roll, Roll, Stroke, Roll, Roll, Stroke, Roll, Roll"
 - See Drill 14 for fine points
- o Drill 7: Hand-Lead Sweet Spot
 - Find your sweet spot
 - Sneak your arm up to an extended position underwater
 - Little or no gap between your arm and the back of your head
 - Fingertips to toes as straight and long as possible
- o Drill 15A: L-Drill for Backstroke timing

Fly/Breaststroke Drills

- Lesson 1 Fly/Breast Balance and Rotation
 - o Drill 1: Head Lead Body Dolphin
 - How:
 - Hands at sides
 - Pulse in dolphin motion leading with chest
 - Make a rhythmic body wave
 - Use body, not arms or legs
 - Kicking should be minimal, no splash, feet stay underwater
 - Don't use thigh muscles
 - Barely submerge head lead with chest
 - Create a ripple down the length of your entire body
 - Close to surface
 - Breathing
 - Initially breath as little as possible
 - Breath with body motion, not by lifting head
 - Maintain body rhythm through each breath
 - Keep head aligned with spine during breath
 - o Drill 2: Hand Lead Body Dolphin
 - Same as drill #1, but with hands in streamline
 - Push hands forward pulse with chest
 - Don't push down with hands use body to generate the pulse
 - Few breaths at first
 - Breathing
 - No downward pressure on hands or arms
 - Keep head aligned with spine
 - No sculling to hold your head up
 - Maintain body rhythm through each breath
 - Count pulses for a length to determine how well you channel you energy forward
 - Think forward reach forward with hands on each pulse
 - Drill 2.5: Underwater Body Dolphin
 - Insert some underwaters here
 - *Emphasize pressing the chest*
 - *Do it on stomach and on back*
 - Drill 3: Slide to the Corners:
 - The "Corners" are slightly more than shoulder width apart
 - How:
 - Chant: Pulse-Pulse-Slide to the corners-breath, in rhythm
 - Then Slide every other pulse
 - Then slide every pulse
 - No downward arm pressure, even when you breath
 - Direct all energy forward with each pulse

- Don't lift head keep it aligned with spine (Most common mistake)
- Lesson 2 Butterfly
 - o Drill 4: Stoneskipper
 - How:
 - Head-lead body dolphin for 2 pulses
 - Pull down and breath make body like stone skipping over the water
 - Hand-lead body dolphin for 2 pulses
 - Underwater recovery on second pulse
 - Chant "pulse pulse slide to the corners, pull pulse pulse pulse, recover pulse
 - Keep head and spine aligned at all times
 - On breath, keep head low and looking slightly down
 - On skip, land forward not down try to lunge over the water
 - Hourglass shaped underwater pull
 - Minimal splash
 - o Drill 5: Body Dolphin Butterfly
 - How:
 - Like stoneskipper with an over-water recovery
 - Hand-lead body dolphin for 2 pulses
 - Slide to the corners, pull down your body, recover and return to hand-lead body dolphin
 - Chant "pulse pulse slide to the corners, pull pulse
 - Low, flat, sweeping recovery
 - Keep head and spine aligned at all times
 - On breath, keep head low and looking slightly down
 - On skip, land forward not down try to lunge over the water
 - Low, flat, sweeping recovery
 - Minimal splash
 - o Drill 6: EZ Fly
 - How:
 - 3-5 long complete, but easy strokes with no breath
 - Switch to catch-up freestyle for rest of 25
 - Add a breath after a few 25s
 - Chant "pulse pulse slide to the corners, pull pulse
 - Stay low, stay long
 - Always forward, long, low, and smooth
 - Breathing
 - Head in line with spine
 - Look down slightly
 - Take a "sneaky" breath"
 - Lesson 3 Breaststroke
 - o Drill 7: Sculling
 - Scull in front without pulling backwards

- o Drill 8: Breaststroke Pull with Butterfly Kick
 - Scull to the Corners for a wide pull
 - Pretend you are diving forward
 - Max extension underwater
 - All energy as forward as possible
 - Limit the up and down, particularly with the head
- o Drill 9: Upside Down Breaststroke Kick Touching Your Heels
 - Keep your knees in line with your body as much as possible
 - Bring your heels back, not your knees up
- o Drill 10: Breaststroke Kick with a Board
 - Make sure the front of the board goes straight forward just below and parallel to the surface
 - Keep your mouth in the water
- o Drill 11: Underwater Breaststroke Kick, Heel Touch
 - Pushoff
 - Pull Down and keep your hands down
 - Staying Underwater, breaststroke with kick touching your heels
- o Drill 12: Underwater Breaststroke Kick, Streamlined
 - Same as above but after 3 heel touches, move to a streamline
 - Stay underwater as long as possible
 - The whole length for top swimmers
- o Drill 13: Breaststroke Pull with two extra Underwater Kicks
- o Drill 14: Breaststroke Pull with one extra Underwater Kick
- o Drill 15: Kick Late, Fewest Strokes Possible (i.e. Breaststroke)
- o Drill 16: Underwater Pullout
- o Drill 17: Cobra
 - Float on your stomach
 - Pull with your arms, pull your hips forward, raise your chest forward like a Cobra and strike!
 - Glide forward slowly and repeat
 - Kick as late as possible and go as far as possible with each strike.

Freestyle Flip Turns

- Stationary Flips
 - o Slap calves on surface of water
 - o Foot speed
 - Comes from stomach muscles
 - o Keep your hands inside of your shoulders
 - o Hands end up over your head
- Moving Flips
- Mid-Pool Flips
 - Swim 2 –3 strokes
- Wall Approach
 - Not quite to wall
 - Keep head down don't look for cross on wall
 - Any visual contact should occur low on the wall or with the T on the bottom.
- Wall Plant
 - O Quick turn to push off position, but don't push off
- Plant, Pause, Push-off
 - o Plant feet
 - o Pause for 2 seconds, not rolling over
 - Push off on back, no kicking
 - See how far you can go
 - Push from butt and quads, not calves
- Wall bounce
 - o Push off like you are bouncing on a trampoline
 - o Imagine kicking the wall
 - Push-off on back concentrating on line
 - Tight streamline
- Six times three
 - Six kicks on back could be body dolphin
 - o Six kicks on side

Backstroke Flip Turns

- No need to every look at wall
 - Use the flags
 - o Keep your head down
- Be able to do it with either hand