



Orinda Aquatics Freestyle Drill Progression/Stroke Development



Progressions for kick, scull and drill

Two foundational drills

"Build the stroke" - one each

Variations/equipment, language/terms, measure regularly, skills to develop, individual stroke keys (three)

Two Base Drills to Master (balance & rhythm)

1) 2 to 6 stroke - 5 point CU w/ strong kick (fins rec)

2) One Arm - Right/Left variations (show shoulder)

Base stroke - length, balance, extension, rotation, controlled recovery

Focus on rhythm/timing. Rotate in/out, ahead of entry/catch

"Kick" Progression

- 1 UW Streamline - rigid, foot speed, "bullet"
- 2 HU Streamline - hyperextend, up-kick, core
- 3 Side Kick - eyes & palm down
- 4 Log Roll (rotation) - arms at side, 10 kicks
- 5 Vert Kick - work kick both ways (can drop)

Scull/"Feel" Progression (can use pads)

- 1 Front Scull ("figure 8's"/reach, feel entry, head up)
- 2 Shoulder Scull ("wipers"/in sweep) face down
- 3 Hip Scull (finish/exit) face down (figure 8's)
- 4 Side Kick Scull - work catch/finish (figure 8's)
- 5 Full-Pull Scull (rotate) face down. UW recovery

"Stroke" Progression

- 1 CU - fingertip or thumb drag (elbow high)
- 2 2 (fins) to 6 stroke - 5 point CU w/ strong kick
- 3 5-Count Freeze (shark fin/shake) quick switch
- 4 Right/Left variations ("show" shoulder)
- 5 1-2-3 Strokes/slide on side - 10 kicks

"Build Legs" Progression

- 1 Glue feet/drag-NO kick, feel roll (hold body line)
- 2 HU Free/dolphin kick (2 beat feel-bounce entry)
- 3 Free - 2 Beat Kick (one kick per opposite catch)
- 4 Free - 6 Beat Kick (hold kick through breath)
- 5 Free - "HAMMER down" kick (high white water)

"Build Stroke" Progression (one from each)

- 1 Side Kick (body position) or log roll
- 2 Full Pull Scull or scull combo (series)
- 3 One Arm combination (timing)
- 4 5 or 10 Count - lift/switch, slide on side
- 5 Catch-up with stroke count and strong legs

Measure (stroke discipline)

- 1 Turn speed (hand to feet) and Turn Master
- 2 Kick counts UW (for race and training)
- 3 Kick speed and endurance (timed/track)
- 4 Stroke count at 2-3 speeds (EN1/EN2/EN3)
- 5 Breathing patterns/discipline in WO & in race

Variations (for technique or training)



- Fists/anti-paddles/regular paddles
- Snorkel - focus on timing, catch, rotation
- Parachute/ankle weights - for resistance
- Cordz (resistance & speed)/Turn Master
- Pull Buoy between ankles (core/line) or thighs
- Tennis Ball or stick (hold for CU - balance)
- Train with stroke counts - 4, 6, 8, 10, 12, etc.
- Train at Stroke Rates (Tempo Trainer) DPS/pace
- Vary breathing (Rt/3rd/Lt/all)

Skill Development for All Ages

- Leave wall: drop on side/slip hand over ear (on 4 & 9)
- Push side to front - carry speed (tight/rigid streamline)
- Have fly kick count UW. Flutter kick through breakout.
- No breath on first stroke off all walls
- Learn 2-beat and 6-beat kick (see above)
- Breathe LOW and EARLY on both sides for balance in WO
- Stay in CU type stroke (for most swimming for balance)
- Turns - tight, spin fast, heels to suit, scull back to SL/exit on bk
- Finish - on side at extension (without breathing)

Philosophy, Language, Stroke Keys, Queues

<i>Philosophy</i>	Progressive Learning - Drill the Drill, Build the Stroke PERFECT practice makes perfect, take PRIDE in technique, "swim for judges", penny in piggy bank (get rich!) MAINTAIN STROKE DISCIPLINE (must know and commit to)
<i>Language</i>	Effortless swimming, ride the glide, work from the core out, DPS is key
<i>Body</i>	Relaxed/set head, good lines (top/side), lean on chest, eyes down Trunk/core rotation (slide on side/skate) balance, rotate in to catch - rotate out for finish/exit (torque) Synch stroke and breath with body rotation
<i>Stroke</i>	Relaxed low hand recovery (out of pocket), train track entry. Slip hand into hole in water. No bubbles, reach/press OVER the barrel, anchor elbow, rotate past the catch, increase hand speed Elbow - high and to the sky on recovery - high and to the side on catch
<i>Breath</i>	Through extension (1 arm SL), EARLY, LOW, QUICK, prior to catch, keep low goggle in water
<i>Kick</i>	Relaxed, narrow, straight, 2 beat OR 6 beat (DO NOT CROSS), kick at surface (through breath)
<i>Str Count</i>	Know stroke rates & stroke count (per lap) at 3 speeds - EN1 aerobic, EN2 endurance, 100 or 200+ pace



Orinda Aquatics Backstroke Drill Progression/Stroke Development



Progressions for kick, scull and drill

Two foundational drills

"Build the stroke" - one each

Variations/equipment, language/terms, measure regularly, skills to develop, individual stroke keys (three)



Two Base Drills to Master (balance & rhythm)



1) Double-Arm Backstroke (lift, rotate, slice, arm wrestle)

2) One-Arm (Right/Left) variations ("show" shoulder)

Sets up recovery line (exit), entry line, shallow catch (keep face dry)

Focus is on rhythm, timing, set head - rotate in and out - entry/catch

"Kick" Progression

- 1 UW Dolphin Kick (rigid SL, good body line, speed)
- 2 Streamline Kick - good body position (boil water)
- 3 SIDE Kick - keep palm down
- 4 Log Roll (balance/10 kicks) arms at side
- 5 Vertical Kick (same as free) can drop down/rise

"Feel" Progression

- 1 Side Scull (catch/exit) "figure 8's", 1-Arm SL
- 2 Head First Hip Scull (feel finish) - NO kick
- 3 Feet First - arms above the head (feel entry)
- 4 Scull Catch (lean on hand - opposite arm up)
- 5 "V-Sit Scull - head up/feet up. Hand speed.

"Stroke" Progression

- 1 Lift-Check-Drop-Rotate (arm asleep/rotate hand)
- 2 Double-Arm (face dry, clap, check, slice)
- 3 Pull on lane line (helps with hand/elbow)
- 4 One Arm combo (pause mid pull/recovery)
- 5 10-count (lift/switch), or 1-2-3 stroke slide

"Build Stroke" Progression (one from each)

- 1 Kick choice (side or streamline)
- 2 Scull choice (above)
- 3 Double-Arm (balance)
- 4 One Arm (rotation)
- 5 Swim - build stroke rate to race pace

"Stroke Rate" Progression (Tempo Trainer)

- 1 SLOW Motion <30
- 2 Moderate: 30-36
- 3 200 Stroke Rate: 36-42
- 4 100 Stroke Rate: 46-50
- 5 Spin Drill (head up - rev up)

Measure (stroke discipline)

- 1 Turn speed (hand to feet) / Turn Master
- 2 Kick counts and kick rates (tempo) UW
- 3 25 UW kick for time/100 kick for time (15m)
- 4 Start for distance (no kick) glide UW
- 5 Stroke rates at race speed (& stroke counts)

Variations (for technique and training)

Fist, parachute, ankle weights (resistance)
 Cordz - resistance/speed
 Fins for speed /Turn Master for endurance
 Paddles (1 or 2), or anti paddles
 Cup, goggles (or iPhone!) on forehead
 Vary Stroke Rates/Tempo Trainer
 Free to back (hold long axis rhythm/rotation)
 Have teammate watch entry (film)

Skill Development for All Ages

Back start (exit/entry) over kickboard or "noodle" (jump)
 Back turns (entry, rotation, exit) - LEGALITY (know)
 Back finish - build, lunge, legs - DO NOT submerge
 Stroke counts for turns (from flags). Check wind at meets.
 IM turn - open. Do not pass vertical (eyes stay up)
 IM turn - flip. Learn both hands.
 Stroke Rates (and counts) for set swimming
 Breathing pattern (below)

Philosophy, Language, Stroke Keys, Queues

<i>Philosophy</i>	<p>Progressive Learning - Drill the Drill, Build the Stroke</p> <p>PERFECT practice makes perfect, take PRIDE in technique, "swim for judges", penny in piggy bank (get rich!)</p> <p>MAINTAIN STROKE DISCIPLINE (must know and commit to)</p>
<i>Language</i>	Hold body line (vertical and horizontal)
<i>Body</i>	<p>Relaxed/set head (in a vice), balance iPhone on forehead!, chin up-head back (ears in)</p> <p>Balance, rotate into catch/rotate out for finish/exit</p> <p>Swim side to side (trunk rotation - Russian Twists)</p>
<i>Stroke</i>	<p>Relaxed arm/thumb lead/perpendicular recovery, shoulder brush ear, slice/clean entry</p> <p>"Throw" shoulder into water, enter at 11 & 1/linear pull line/push back</p> <p>Anchor elbow (points to bottom), "arm wrestle" - push, release</p>
<i>Breath</i>	Inhale on entry/exhale on exit of same arm
<i>Kick</i>	<p>From thigh/hip, knees stay below surface (don't break glass), boil water/kick ball</p> <p>BUILD Legs AND UW through race!</p>
<i>Turns</i>	Build into wall/attack, "slip" under surface, spin tight/fast, minimum of five fast kicks (know kick count)
<i>Stroke Rates</i>	Know 100 and 200 stroke rates



Orinda Aquatics Breaststroke Drill Progression/Stroke Development



Progressions for kick, scull and drill

Two foundational drills

"Build the stroke" - one each

Variations/equipment, language/terms, measure regularly, skills to develop, individual stroke keys (three)

Two Base Drills to Master (balance & rhythm)

1) Pull - Flutter Kick (carry speed in streamline)

2) Pull - Dolphin Kick (work rhythm, pace, & speed)

Keys: lock elbows/squeeze head, eyes down on outswEEP

Work ONE dolphin kick (in BT kick timing), LUNGE to SL (set tempo)

"Kick" Progression

- 1 Egg beater or cycle - into alternate Rt/Lt
- 2 UW Knee Down to whip kick (pull buoy opt)
- 3 On Back (1/2 in SL, 1/2 hands under hips)
- 4 On stomach (same) - brth/kick/glide
- 5 Vertical Kick or kick against wall (hold body line)

Scull/"Feel" Progression (can use pads)

- 1 Front Scull ("figure 8's") feel/reach, head up
- 2 Shoulder Scull ("wipers"/in sweep) face down
- 3 Sitting Scull (work catch/anchor) knees up
- 4 Hip Scull (on back-feet first, work catch)
- 5 Pull Downs (UW - fast free kick) - hold line

"Pull" Progression

- 1 Pull Head-Up (fast, compact - fly kick on rec)
- 2 Pull w/ Flutter Kick (10) - work SL/set up catch
- 3 Pull with Dolphin Kick - work short axis (at SR)
- 4 Alt. right/left/2 FULL with FR, FL, or BT kick
- 5 Pull - alt BT/Fly kick to hold rhythm

"Full Stroke" Progression

- 1 Three pulses into full pull. Repeat with kick.
- 2 2 pulls HU/1 kick and glide (long)
- 3 2 kicks UW/1 pull and glide
- 4 1 stroke per black line (4-6 strokes per lap)
- 5 Blend all pulls - HU, flutter, dolphin, swim

"Build Stroke" Progression (one from each)

- 1 Kick on stomach or back (foot speed)
- 2 Scull - figure 8's, wipers, or sitting
- 3 Pull flutter (work SL and catch)
- 4 Pull dolphin (work rhythm/hand speed)
- 5 One pull/two kicks, to long glide, to pace

Measure (stroke discipline)

- 1 Turn speed - time touch to feet
- 2 Measure "both" pull downs for efficiency
- 3 PD for distance AND speed PD's UW 25
- 4 Min stroke counts per lap (then for time)
- 5 Kick time for 100, plus min kicks per lap

Variations



Fist, parachute - for resistance/feel
 Ankle weights - leg strength
 Cordz for resistance/speed
 Paddles (1 or 2) sculling (or can hold top)
 Fins - carry speed in flutter or dolphin kick
 Tempo Trainer for DPS or pace
 Pull buoy for high hips
 Snorkel for head/neck alignment
 Tennis ball under chin - head position

Skills Development for all ages

Legal kick - oval not circle (rotate ankle, "grab", push)
 Pull down (fly kick) - from core: compact, power, hold SL
 Pull down (pull) - narrow, finger tips down, hold line/shrug
 Pull down (recovery) - hands close to body, eyes DOWN
 Measure each point of PD: kick, pull, B/O points
 Turn - knees tight, elbow slice, eyes on thumb, drop
 Dive - relaxed/balanced - a little deeper for breaststroke
 Learn stroke counts and stroke rates for 100/200
 Attempt to reduce stroke count swimming at 3 speeds

Philosophy, Language, Stroke Keys, Queues

Philosophy	Progressive Learning - Drill the Drill, Build the Stroke PERFECT practice makes perfect, take PRIDE in technique, "swim for judges", penny in piggy bank (get rich!) MAINTAIN STROKE DISCIPLINE (must know and commit to)
Language	Effortless swimming, ride the glide/work from the core out (SHORT AXIS), swim on the water LINE
Body	Good line, stay LOW to the water, slide hips forward (insweep), lunge body FORWARD on recovery Channel energy forward throughout stroke - not up/down, lean on chest/hips high, slide on ice
Stroke	"open elevator doors" on outswEEP (and look down the shaft!) Slide (sweep out) to corners , "anchor" elbows (KEEP HIGH), pull in circular motion Compact, fast, strong - squeeze and "shrug" , thumbs graze surface on recovery, to palms down SL "Slide triangle" forward, "squeeze head" with biceps in streamline - "shoot through tube" (fast)
Breath	Head IN LINE with spine (tennis ball) - eyes on water, STAY LOW, breathe with body on insweep
Kick	Narrow, fast, "sneak" heels up, "grab" water and "squeeze" BACK, "CLAP" feet (as nose touches)
Pull Down	Narrow light bulb , high elbows, fingertips down, hand speed, sneak up, "stair-step"



Orinda Aquatics Butterfly Drill Progression/Stroke Development



Progressions for kick, scull and drill

Two foundational drills

"Build the stroke" - one each

Variations/equipment, language/terms, measure regularly, skills to develop, individual stroke keys (three)

Two Base Drills to Master (balance & rhythm)

1) (Slow) Pull with Flutter Kick

Work exit, relaxed rec, hand placement (no splash), deep catch

2) One-Arm Fly (opposite arm up/breathe to side)

Key to rhythm - stay squared to bottom, lunge/press, kick out/in

"Kick" Progression

- 1 UW Streamline (bullet) - rigid SL/core
- 2 Side - 1 arm SL or arms crossed
- 3 On Back - streamline
- 4 On Back - head up/arms at side (crunches)
- 5 Vertical Kick (can fall under and work up)

Scull/"Feel" Progression (can use pads)

- 1 Front Scull ("figure 8's") - feel entry, head up
- 2 Shoulder Scull ("wipers"/insweep) face down
- 3 Hip Scull (on stomach) - figure 8's, face down
- 4 Full Pulls (UW rec)-narrow light bulbs/flutter kick
- 5 Sitting Scull (work catch/anchor) knees up

"Full Stroke" Progression

- 1 Pulse - 3 pulse to pull/3 pulse to recovery
- 2 Pull Flutter Kick - slow arms/fast feet
- 3 One-Arm Combo (opposite arm in front)
- 4 Stroke-Hips-Float (feel rhythm/roll/extension)
- 5 Down/Up Combo (3 kicks UW/1 or 2 strokes)

"Build Stroke" Progression (one from each)

- 1 Fly kick on back, side, or UW
- 2 Scull progression: 8's, wipers, hips, full pull
- 3 Single-Arm Combo
- 4 3 Kicks-One Stroke or pull with flutter kick
- 5 Race pace and race breathing

"Breathing" Progression (key is to rhythm/efficiency)

- 1 No Breath - swim through water line (low)
- 2 1 Up/1 Down - same
- 3 2 Up/1 Down - hold body line
- 4 Breathe every stroke - hold rhythm
- 5 Race BP/SR - 200 or 100

Measure (stroke discipline)

- 1 Turn speed - time touch to feet (chin on water)
- 2 Timed 25 UW fly kick
- 3 UW kick rate (with Tempo Trainer)
- 4 Train with kick count and stroke count
- 5 1x100 Fly - UW 15m all walls (timed)

Variations



Fist for feel/Paddles for strength & DPS
 Fins - for speed assistance/technique
 Pull Buoy for body position
 Snorkel for head/neck stabilization
 Cordz for resistance or speed
 Turn Master - endurance (Test Sets)
 Tempo trainer for speed UW/race tempo
 Ankle weights for leg strength
 Change breathing to work/hold rhythm

Skills Development for All Ages

UW Kick - undulation - front stability (from core not knees)
 Learn stable hand entry (NO SPASH HANDS) - see drills
 Kick timing - kick out/kick in (know kick amplitude)
 Legality - always two-hand touches
 Learn kick counts for training and racing
 Know breathing pattern for training and racing
 Breath discipline - no breath on breakout or into finish
 Fly to back transition IM turn (same as open turn)

Philosophy, Language, Stroke Keys, Queues

<i>Philosophy</i>	<p>Progressive Learning - Drill the Drill, Build the Stroke</p> <p>PERFECT practice makes perfect, take PRIDE in technique, "swim for judges", penny in piggy bank (get rich!)</p> <p>MAINTAIN STROKE DISCIPLINE (must know and commit to)</p>
<i>Language</i>	Effortless (NO struggle) swimming/work from the core out
<i>Body</i>	<p>Stay low and long, channel effort FORWARD - NOT up/down</p> <p>Swim through the water line (as if being pulled to other end)</p> <p>Work/feel short axis rotation</p>
<i>Stroke</i>	<p>Relaxed low recovery, "throw hands" to end of pool, NO splash hands, "feathers NOT bricks!"</p> <p>"Set" in front of shoulders</p> <p>High elbow catch, show diamond, push through/back, fingertips down, "slice" out, round recovery</p>
<i>Breath</i>	Keep head in line with spine, stay low (tennis ball in chin) "push-breath" (later)
<i>Kick</i>	Work power two-beat kick (kick hands in-kick hands out), have kick count for workout and race
<i>Breathing</i>	Know breathing pattern for 100 and 200 Fly and wall patterns. Have training breathing pattern.