

Swim strokes' Basic Drill Progressions

-- John B. Rahul

***Note – Most of the following drills are purely non-static. Hence, remember to never skip demonstrations, dry-land practices, other static drills etc. before the respective activities.**

***Remember: Order of Instruction (while teaching a stroke)**

- Body position
- Legs
- Arms
- Breathing
- Coordination

Freestyle

arms are used one at a time
to pull the swimmer's body through the water



Legs :

- 1) 'Piano Fingers' – Grip the bottom of the board:
 - Arms and body have to be elongated
 - Relaxed neck and head looking straight down.
 - Short & fast kicks (roughly in the range of hip width).
 - Straight legs with slightly relaxed knees.
 - Flutter Kick from the hips.
- 2) Streamline kicks (Torpedo/ Rocket hands with 'sandwich palms') :
 - Emphasise that elongation leads to a body position at the surface.
 - Straight elbows with arms trying to cover the ears.
 - Bring head straight up to breathe with hands still in the front relaxed.
 - Short, straight & Fast flutter kicks.

3) Lateral Kicks (Side Kicking) :

- This is important as it helps to coordinate and improve balance, kicks and breathing.
- One arm on the board and the other beside the thigh with shoulder facing up and ear relaxed laying flat on the arm.
- Ensure kicks don't go too wide and they stay consistent and strong.

Arms :

1) 'Rainbow Arms'

- Mainly to be emphasised for beginners to have their fingers closed and have a strong & long reach with their whole arms. (Especially for kids as they won't have enough power to use their forearms to push alone, hence they can use their whole arm)
- Emphasise to dig deep into the water with thumb brushing the thigh (as an indicator for a long strong pull)

2) 'Piano Fingers' – Grip the bottom of the board:

- Strong pulls (should not be rushed and too fast) in order to feel the force with their hands – One arm at a time as the other arm holds onto the board.
- Look for consistent kicks and long straight arms.
- Encourage them to blow bubbles and can catch a breath by looking up after every 2, 3 or 4 arm pulls.

Breathing :

1) Lateral side kicking with arm pulls and breathing introduction :

- To practice slow and strong arm pulls with good body flexibility and rotation in order to kick efficiently. (short straight kicks to have high body positioning)
- Pull one arm from the board at a time with flexible and easy rotating body. As one arm pulls, the other has to reach out far and elongate to maintain the body position on top.
- Once the arm pulls and kicks are in acceptable sync, teach to turn and breathe.
- While turning, the shoulder has to roll out well; NOT just twisting the neck out.
- Lie with relaxed neck with ear on the arm.

2) Lateral side kicking + breathing improvisation :

- Same as above but every time they turn to breathe, they have to hold the side kicking position for 5 or 3 seconds (Count 1000, 2000..... 5000)
- During breathing one arm will be elongated on the board and the other would be on the side beside the thigh as the arm pull is done. Maintain head position and lateral kicks for few seconds as mentioned above.
- This allows plenty of time for the swimmers to adjust / rectify the various components. Keep reducing the second counts as they get better to allow lesser time for faster coordination to sync.

3) Breathing on both sides :

- Get the student used to breathing on one side first (their comfortable dominant side) and then introduce the other side too.
- Breathing on both sides is necessary in order to achieve a well-balanced stroke.
- Practice breathing on every 3 arm pulls (direction of breath will alternate after every 3 pulls) ; and if the breath control isn't enough for the younger ones, they may learn to breathe on every 2 arm pulls (one-sided breathing).

Coordination :

1) Catch-up freestyle with high elbow recovery :

- With a kickboard, practice one arm pull at a time (repetition of all the above) but emphasise on arm recovery to the board by running the thumb up side to push the elbow high up, brushing the shoulder and then gently running the fingers across the top of the water to the board.
- The recovery can be done slowly as the target here is to achieve high elbows.
- Also, once they are stronger (not advisable for beginners and very young ones), start emphasising on having a relaxed and bent elbow inside the water after starting the pull in order to use forearm to push the water behind while extending the forearm all the way to achieve a strong stroke like how you would do your freestyle.
- When it is acceptable, try without the board. (Maybe on the coach's palm without much pressure on it just as a guideline for them)

2) Semi catch-up :

- Here the pull starts just before the recovering arm returns. As the recovering arm passes the head (with high elbows), the pull has to begin.

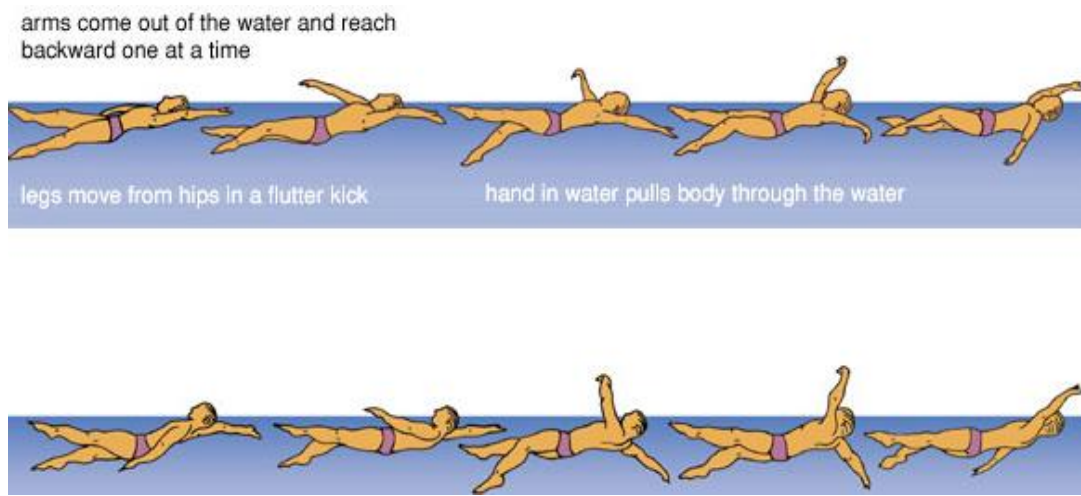
3) 6 kicks drill (6' o clock drill) :

- With one arm in the front and the other one to the side, for every 6 kicks, pull and breathe on the arm coming forward. Try to look for breath before finger tips enter the water.
- This is important as it develops an early breath with good rotation hence promoting a low breath with high body position.

4) Full stroke :

- Breathe on every 3rd pull while trying to close the gap between the ear and the arm.
 - Long and strong arm pulls with long recoveries to achieve the slight glide to the front to achieve a low breathing position.
 - Emphasise on all the above mentioned techniques for all the various body parts !
-

Backstroke



Legs :

- 1) Hold board to the chest / piano grip with straight arms for board above the thighs :
 - Ensure that neck is relaxed with head looking straight up.
 - Hips and tummy to be pushed up high.
 - Get started by holding the board to the chest and kicking from the hips with straight kicks with the toes and feet causing splashes on the surface.
 - Move on to piano grip as this puts the board much lower and is a good chance for them to work on pushing their hips up while having a calm head/neck position.
- 2) Soldier Arm kicks :
 - The students are to float on their back have their hands by the side (no kickboard) and achieve the same body and kicking conditions as above.
- 3) Streamline kicks on the back (Torpedo/ Rocket hands with 'sandwich palms') :
 - The arms have to be elongated to squeeze the ears.
- 4) Side kicking on the back (with and without kickboard) :
 - When one arm is extended to the top and the other is by the side, head has to continue a relaxed position looking up.
 - Rotate shoulder for it to come out of the water and face up. Maintain strong kicks while having a relaxed body.
 - This allows good engagement of the core muscles to achieve a flexible body position while rotating (somewhat similar to freestyle)

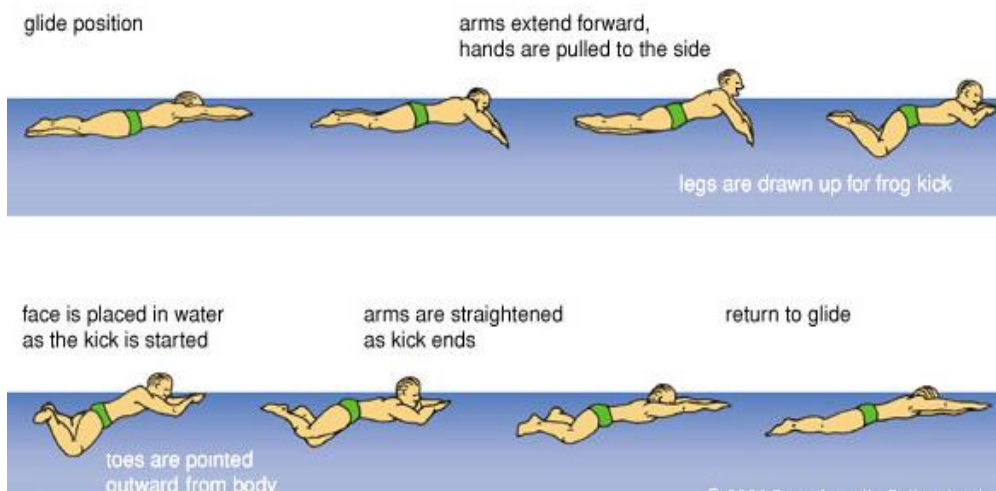
Arms :

- 1) 'Piano grip' with straight arms and one arm pull at a time :
 - Emphasise on thumb exiting the water and pinky (little finger) entering the water.
 - As one arm is maintained straight on the board, other arm does a 'reverse rainbow' with arm straight brushing the ear and reaching far back as possible (this would slowly introduce the shoulder rotation)
- 2) 6 kicks drill (6' o clock drill) :
 - Similar to freestyle, one arm on top and the other by the side; change arm for every 6 kicks.
 - Emphasise highly on shoulders leading the rotatory motion and as they roll imagine full force and weight goes to that side in order to get a strong push.
- 3) Bent arm pull (transition better from 'rainbow arms') :
 - To reach backwards and as pinky enters the water, shoulder rolls simultaneously and the elbow drops and bends when in the water.
 - The forearm and palm push through with the palm finishing the stroke while its facing down.

Coordination :

- Emphasise on 'windmill' motion to attain continuous fast arm pulls with continuous flexile alternate shoulder rotations.
- Ensure that all the above mentioned techniques for all the various body parts are implemented !

Breaststroke



Legs :

- 1) 'Frog legs' sitting on the edge / laying at the edge (bend-open-snap motion) :
 - To work on dorsi-flex of the feet and toes pointing outwards.
 - Emphasise on where the kick's power and momentum comes from with the snapping motion of the legs.
 - This activity can even be done on floating mats if available as it adds the fun element for the kids.
 - Kick and pause for 2-3 seconds and repeat (In order to introduce gliding)

- 2) Streamlined breaststroke Kicks with board / noodle :
 - Holding the board with arms straight, make them kick and glide.
 - The idea is NOT to rush and get a fast kick; but we need to get a calm but strong snapping kick.
 - Emphasise that the heels bend towards the back instead of knees bending towards chest (as that would obviously push them deeper down in the water)
 - If the hip is dropping too low, a noodle could be placed under the hip to get confidence on the kicking motion.
 - Teach the timing of 'bend, open and snap' so that they follow the coach's timing to bend the legs correctly and open more of the lower legs and finally snapping the legs together.
 - Keep arms in front and look up forward to breathe.

Arms :

Noodle under the arm-pits :

- Teach 'pizza arms' for the very young ones and beginners so they have enough power to pull forward. (Make a big pizza till the chest and cut the pizza by shooting the arms forwards)
- After they can move forward satisfactorily with all the above mentioned, the 'pizza' could be made smaller to achieve the relaxed 'scooping' motion until under the chin.
- Follow each pull with a snapping kick and 2-3 second glide.

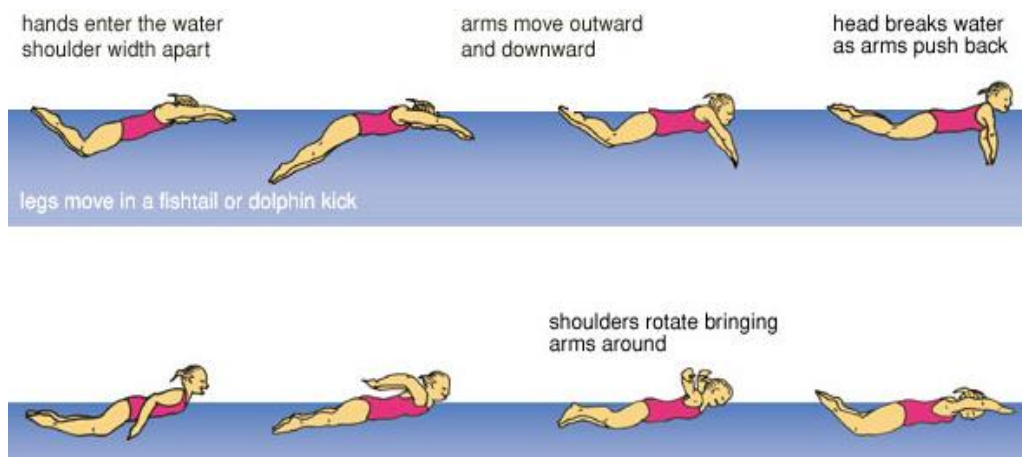
Breathing & coordination :

- 1) With noodle underneath, achieve good bubbles, followed by coming up to breathe as arm scooping motion occurs and shoot arms forward quickly without holding there for too long.

- 2) More swim drills :
 - Breaststroke with 2 kicks - 1 pull motion : This would emphasise on gliding ability and enhance breath control. It would also give the younger ones sufficient momentum in each cycle with the extra kick.

- Breaststroke with closed fists : This would improve their arm work and emphasise the use of forearms.
 - Breaststroke with closed eyes : This would emphasise and improve on head positioning maintaining downwards even after a breath.
- 3) Full coordination :
- The entire complete sequence for it would be : PULL, BREATHE, KICK & GLIDE.
 - Emphasise on 'scooping to breathe' and 'kicking to glide'.

Butterfly



Legs :

- 1) Dolphin kicks with 'skinny man – fat man' motion :
 - Ensure legs are close together and tummy has to move up & down continuously with flexible hip motion.
 - Relaxed and slightly bending knees.
- 2) Soldier Arm kicks (on surface and underwater dolphin kicks) :
 - Arms by the side and practice comfortable movement on the surface as well as underwater.
- 3) Streamline kicks (Torpedo / Rocket arms) :
 - Emphasise on good elongation to reduce the shoulder action and continuously thrust from the core.
 - Ensure that the toes and feet come out of the water to push the water back. It is important they realise that's where the propulsion.

Arms :

- 1) 'Butterfly wing' motion :
 - This has to be done very detailed on dry-land so that they get a good idea of the technique.
 - Explain that you have to pull down through the water towards the belly-button and then push it all backwards in one motion. Then followed by the recovery with straight arms far on the sides. (thumb down during recovery and hands meeting in the front)
- 2) 4 kicks and 1 pull drill :
 - Do 4 strong fly kicks and do one motion of 'butterfly wing' arms to breathe but the face has to be back in the water before the arms. Emphasise on a nice relaxed glide after each arm recovery.

Breathing & Coordination :

- 1) 3 kicks followed by one breath :
 - Do 3 strong fly kicks with a breath on the 3rd kick and while breathing arms should be pulled all the way back and chin comes up to breathe.
- 2) More swim drills :
 - One arm butterfly : To understand the arm motion and timing further (Can be a bit tricky to do)
 - Butterfly with no breathing : This will improvise on a flatter body position.
 - Butterfly hammerhead : The head hits the water fast even after taking a breath. This will promote good breathing momentum and overall coordination.
- 3) 2 kicks – 1 arm :
 - This time they have to do 2 kicks for every 1 arm pull.
 - Emphasise on 'kick to breathe and kick again to glide'