

SWIMMING

SKILLS and DRILLS

Filip Roelandt - University Ghent

CONTENTS

Contents

1. complete methodical instruction	3
2. How to correct a mistake.....	4
3. Skills and Drills	6
3.1. Crawl	6
3.1.1. leg drills	6
3.1.2. arm stroke	9
3.1.3. breathing and coordination.....	10
3.2. Breast stroke.....	14
3.2.1. leg drills	14
3.2.2. arm stroke and breathing	18
3.2.3. coordination.....	20
3.3. Back crawl	22
3.3.1. leg drills	22
3.3.2. arm stroke and coordination.....	25
3.4. Butterfly.....	29
3.4.1. the dolphin kick.....	29
3.4.2. leg drills	30
3.4.3. arm stroke, coordination and breathing.....	32

SUMMARY

COMPLETE METHODOICAL INSTRUCTION

- Louwagie -

TOPICS

- the swimming instruction is based on a global methodology. The instructor starts to work in a general context. This stage is called a swimming form. The swimmer is responsible for the propulsion, there is no kick-board, no partner to help, he has to do it all by himself.
- In certain circumstances, the use of floating mediums can accelerate the instruction process. In this stage or level we talk about practising forms. (using kick boards, pool buoys, paddles, fins, ...). These practising forms follow the swimming forms and precede the analytic drills.
- Difficult movements and swimmers with difficulties or are being taught by means of analytical drills which means
 - with a partner: - pulling or pushing the swimmer
 - taking the swimmer as a wheelbarrow
 - against the wall: - leaning on the elbows (lying on the back)
 - grasping the wall
 - standing with the body bent forward in shallow water (water which reaches the hips = at hips height)

THE DIFFERENT LEVELS USED FOR THE INSTRUCTION OF SWIMMING STROKES

basic level = to float with the face in the water, arms extended (as an arrow)

1. floating as an arrow while kicking the legs
2. floating as an arrow while stroking the arms
 - in the beginning without breathing,
 - afterwards with breathing
3. coordinating the leg kicks and the arm strokes (without breathing)
4. working on the full stroke

COMPLETING

HOW TO CORRECT A MISTAKE?

Improve your full stroke, try to do exercises that are very close to the global stroke, try to avoid a simplification of the stroke (do not work analytically if not necessary).

Make the swimmer aware of the mistake, ask him to correct his mistake, just by paying attention to the mistake made during the full stroke. When this is not sufficient, when he still makes the same mistake, then do an easier exercise. Attention: Not too easy, but going down step by step.

Make the exercise easier by omitting a part of the stroke. Make it easier by switching over into a practising form or analytical drill, if the former is not sufficient enough.

Swimming forms - propulsion

- floating
- breathing (~~breathing~~)
- arm stroke, leg kicks, coordination

Practising forms - propulsion

- ~~floating~~
- breathing (~~breathing~~)
- arm stroke, leg kicks, coordination

Analytical drills - ~~propulsion~~

- ~~floating~~
- breathing (~~breathing~~)
- arm stroke, leg kicks, coordination

Try to look for a level in which you teach the correct execution of the above mentioned things, try to look for an exercise in which you can automate the correct movement.

The correction depends on the automatisisation of the movement, make then repeat the correct performance. Then go up again, have them do more difficult exercises, but do it step by step. Work slowly and work to the full stroke as an objective.

Automatisisation means performing without or with the minimal amount of attention. The last test for a correct performance is combining two different strokes (combining is asking a lot of attention). When you (the trainer) can no longer see the mistake, be sure that the (new) stroke is performed automatically. Afterwards you can start working on the physical attitude while stroking.

remarks on the automatisisation process

- correcting a performance (emphasize) asks a lot of attention from the swimmer
- whenever there is too little (free) attention, when the swimmer is too busy "watching" (thinking about) other parts of the stroke, he can not do the correction thouroughly
- there are too many things the swimmer should see to
- he cannot perform correctly
- so the correct stroke can not be exercised
- there is no automatisisation of a new stroke, so that the mistake will not be corrected

This means there has to be some amount of free attention to correct the mistake.

- therefore we offer an easier performance (make the stroke easier)
- the new drill can be performed perfectly
- the correct stroke can be drilled, you can start the automatisisation
- after a while the new part of the stroke will be performed automatically. Then we can start adding new parts to the stroke again (making the exercise more difficult)
- offer new and more difficult exercises, step by step, do not exaggerate or there will be a lack of attention and the mistake will happen again.
- upon noticing the mistake , immediately offer an easier exercise
- until the new movement is correctly integrated in the full stroke
- finally we can start working on the physical aspects of the stroke (as the physical training asks a lot of attention)

SKILLS AND DRILLS

leg drills in crawl

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1			<ul style="list-style-type: none"> - lying on the front side - grasping the wall - head out of the water, chin in the water, push the hips high 	<ul style="list-style-type: none"> - kicking continuously - the kick is not deeper than the normal thickness of the body. - kick up the feet, so that you can try to catch white water - lift the feet out of the water until you see the heels - very flexible knees and flexible ankles - arms extended, leaning on a kick board, will lift the shoulders. The legs will have to kick harder. In a more difficult exercise, the swimmer will lean on the shoulders of a partner (watch out for the back)
analytical drill-2			<ul style="list-style-type: none"> - lying on the back - leaning with the elbows on the steps of the pool 	
analytical drill-3			<ul style="list-style-type: none"> - lying on the front side in the shallow part of the pool (at knee height) - touch the bottom of the pool with your hands - kicking continuously 	
analytical drill-4			<ul style="list-style-type: none"> - working with a partner - the partner pulls you forward - face in the water 	
analytical drill-5	exercising the lateral kick		<ul style="list-style-type: none"> - the swimmer is being held on his side by a partner - the arms are extended, held by the partner 	
practising form-1			<ul style="list-style-type: none"> - use a kickboard - arms extended, the elbows extended on the kick board - head out of the water, chin in the water - try to catch white water with the feet 	<ul style="list-style-type: none"> - kicking continuously
practising form-2	developing a strong kick		<ul style="list-style-type: none"> - use the swim fins and a kick board - chin in the water - arms extended on the kick board 	

SKILLS AND DRILLS

leg drills in crawl

level	additional purpose	outline	description of the exercise	information about the performance
practising form-3			<ul style="list-style-type: none"> - hold the kick board against the stomach - lying on the back - the body is streamlined and the hips are high - kicking continuously 	
swimming form-1			<ul style="list-style-type: none"> - arms extended, - the face is in the water, do not breathe 	<ul style="list-style-type: none"> - lift the head in relation with the sinking of the legs - keep the feet as an extension of the legs - learn to stretch the knees - avoid a retro flexion of the head for the breathing
swimming form-2			<ul style="list-style-type: none"> - arms extended, turn around the longitudinal axe just with the leg kicks 	
swimming form-3			<ul style="list-style-type: none"> - one arm is extended up, the other is near the body - kicking continuously 	
swimming form-4			<ul style="list-style-type: none"> - arms are up in front, the hands on top of each other, the arms are tight along the ears, the ears are covered - the exercise gives you a very streamlined effect in the legs - the body is completely extended - the face is in the water - using leg kicks for propulsion 	
swimming form-5	lateral kicks		<ul style="list-style-type: none"> - one arm is forward, one arm is back - the elbow of the extended arm is high, near the surface of the water - the other shoulder is out of the water - the body maintains a position with an angle of about 45° with the water - the face is in the water - using a continuous leg kick 	
swimming form-6			<ul style="list-style-type: none"> - "make six and change" - kick six times on one side, switch and kick six times on the other side. 	<ul style="list-style-type: none"> - you cannot spread the legs by any great amount - the body is streamlined

SKILLS AND DRILLS

leg drills in crawl

level	additional purpose	outline	description of the exercise	information about the performance
			<ul style="list-style-type: none"> - the body should roll each six kicks - put the shoulder out of the water - it eliminates the resistance at front 	
swimming form-7	more feeling in the kicks of the feet and the legs		<ul style="list-style-type: none"> - both arms extended, the body is streamlined - the swimmer is under the surface of the water 	<ul style="list-style-type: none"> - turning the feet to the inside
swimming form-8			<ul style="list-style-type: none"> - kick on the side, one arm extended, one arm back - completely on the side (90E) - the face is in the water, - the shoulder is out the water 	<ul style="list-style-type: none"> - the coach can watch if the kick is opening up too wide (not any thicker than the widest part of the body)
swimming form-9			<ul style="list-style-type: none"> - "Power Kicking Drill" - the head up and the arms are both at the back - keep the shoulders and the head very high out of the water - kick hard (you can use fins) 	

SKILLS AND DRILLS

arm stroke in crawl

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1	hand, wrist, elbow entry		<ul style="list-style-type: none"> - standing drill in shallow water (at hips height) - the body is bent forward, the chin is 30 cm above the surface 	<ul style="list-style-type: none"> - the elbow should always be the highest part of the swimming - the entry is being made with the fingers first - you push the water back just passing the bathing suite - as the arm recovers, the hand should be just outside the elbow - the hand entry should be between the eye and the ear - a little out , a little in, a good "S"-pattern
analytical drill-2			<ul style="list-style-type: none"> - change the previous drill into a walking drill - after a few meters we are falling downhill and starting to make a full stroke - the face stays in the water 	
analytical drill-3	producing a higher resistance during the pull and push		<ul style="list-style-type: none"> - swimming the full stroke - the partner takes the ankles, and he is pulling the swimmer slowly backward 	
practising form-1			<ul style="list-style-type: none"> - a standard pulling drill - the pool buoy is worn high in the thighs to keep the legs up - use hand paddles, and a small inner tube (diameter 8 cm) wrapped around the ankles - full arm stroke 	<ul style="list-style-type: none"> - the elbow is up in the stroke and is leading the recovery
practising form-2			<ul style="list-style-type: none"> - you can use fins in all the previous exercises 	
swimming form-1			<ul style="list-style-type: none"> - arms extended, the head is squeezed between the arms - use leg kicks - after 6 meters start the full arm stroke, taking one breathe and stop 	
swimming form-2	lengthen the arm stroke		<ul style="list-style-type: none"> - swim the full stroke - look at the hand coming out of the water 	

SKILLS AND DRILLS

breathing and coordination in the crawl

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1	breathing drill		<ul style="list-style-type: none"> - standing in shallow water (at hips height) - the body is bent forward, the nose is in the water 	<ul style="list-style-type: none"> - when breathing, the chin is following the shoulder roll - try to maintain a good balance - inhale through the mouth - exhale through the mouth and nose (while your face is in the water) - do not turn your head too much on the side, keep the eye in the water - look to the side of the pool - maintain a high elbow
analytical drill-2			<ul style="list-style-type: none"> - standing drill - the body is bent forward in shallow water (at chest height) - "chicken wing", the hand takes the armpit - the elbow is maintaining a very high position 	
analytical drill-3			<ul style="list-style-type: none"> - a walking drill with the body bent forward - after a couple of meters the swimmer falls forward and starts the full armstroke - no breathing 	
practising form-1			<ul style="list-style-type: none"> - using the previous drills with fins 	
practising form-2	the recovery of the arms		<ul style="list-style-type: none"> - one arm on a kick board, the head is up, the chin touches the water - the other arm is working (high elbow, and kicking continuously) 	<ul style="list-style-type: none"> - high elbow (the movement is shorter)
swimming form-1			<ul style="list-style-type: none"> - a stretched body swim - starting under the water surface, the arms are extended, only using leg kicks - after 4 meter you can start the arm stroke - no breathing 	
swimming form-2			<ul style="list-style-type: none"> - starting with the previous exercise - after four complete arm strokes, the body turns on the back 	
			<ul style="list-style-type: none"> - arms extended up, body in a streamlined position 	<ul style="list-style-type: none"> - looking to the ceiling

SKILLS AND DRILLS

breathing and coordination in the crawl

level	additional purpose	outline	description of the exercise	information about the performance
swimming form-3			<ul style="list-style-type: none"> - the head is fixed between the arms - making four full arm strokes - after four full armstrokes, inhaling in an oversized position, the breathing time is also oversized 	<ul style="list-style-type: none"> - during the breathing the hand is forward - during the breathing one eye stays under water - exhaling under water
swimming form-4			<ul style="list-style-type: none"> - a stretched body swim - no breathing, face is in the water - you count the strokes, the number of kicks for a cycle - 1-2-3 on one arm, 4-5-6 on the other - the body is perfectly stretched, very streamlined - it is very important to count the kicks 	
swimming form-5	lengthen up the stroke		<ul style="list-style-type: none"> - one arm extended, one arm back and just stroke with one arm - breathing during each arm stroke - the arm in front remains stretched the whole time - "extending for the reach", try to reach further than the extended arm. This drill is good to force the swimmer to lengthen up the stroke 	
swimming form-6			<ul style="list-style-type: none"> - the catch-up crawl drill - an overreaching kind of stroke - each arm has to wait for the other, - you do not grap the other hand, you just swim up to it - stretching up a little more than you normally do 	<ul style="list-style-type: none"> - the body is streamlined - a high elbow throughout the stroke
swimming form-7	recovery		<ul style="list-style-type: none"> - head is up, chin is in the water - armstroke with a high elbow - shorten the stroke - this waterpolo drill asks a lot of power 	
swimming form-8	bilateral breathing		<ul style="list-style-type: none"> - bilateral breathing drill - breathing each three arm strokes - you must get used to breathing on one side as well as on the other side (competition) 	<ul style="list-style-type: none"> - watch out; "do not overbalance"

SKILLS AND DRILLS

breathing and coordination in the crawl

level	additional purpose	outline	description of the exercise	information about the performance
swimming form-9	breathing during sprints		<ul style="list-style-type: none"> - swimming the full stroke - exhaling, very explosively and very late - try to use the floating volume of the lungs as much as possible 	
swimming form-10	high elbow drill		<ul style="list-style-type: none"> - use the 2-beat-crawl - one arm is extended, the other is back - the extended arm is working with a full arm stroke - you breathe to the opposite side you are stroking with - when the left arm enters, the right shoulder and elbow will come out of the water 	<ul style="list-style-type: none"> - you breathe as the hand enters - turn your head aside to breathe - high elbow position
swimming form-11	sense of touch in the handstroke		<ul style="list-style-type: none"> - using the previous drill with a closed fist - moving up to a full stroking drill with a closed fist - gradually opening the hand 	
swimming form-12			<ul style="list-style-type: none"> - "chicken wing" drill (can also be a standing drill) - holding the armpits with the hands, moving from a quarter "chicken wing" to a half "chicken wing" up to a full stroke 	<ul style="list-style-type: none"> - maintain a high elbow position
swimming form-13	increase the amplitude of the strokes		<ul style="list-style-type: none"> - "swim the rope drill" - a rope, in the length of the pool, is about 20 cm under the water surface - grabbing the rope and holding it in a stationary position and pulling the body by it - count the number of strokes you'll needed for a length - on the way back, you maintain the same number of strokes, do not miss that number by more than one) 	

SKILLS AND DRILLS

leg drills in breast stroke

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1			<ul style="list-style-type: none"> - on the edge of the pool, hands are leaning backwards - lying on the back and afterwards on the front side 	<ul style="list-style-type: none"> - the recovery is at a slower pace than the kick itself. - the recovery of the feet and the legs is smoothly, the recovery is slower than the propulsion - the feet recover up towards the buttock - accelerating throughout the kick, building up speed - turn the toes out and try to pick up water in your feet before kicking water back. Push the water back with the bottom of your feet. - stretch and streamline the legs as you finish each kick - lift the leg as you complete the kick to lessen resistance - a little lift of the back of the knees - look for a natural kick, without extremes of too wide, or too narrow of a kick.
analytical drill-2			<ul style="list-style-type: none"> - leaning on the elbows, on the steps of the pool. - drill the leg kicks (using an assistant) 	
analytical drill-3			<ul style="list-style-type: none"> - sitting on the steps, pushing the kick board (floating on the surface) away with the propulsion of kick 	
analytical drill-4	feeling the correct position of the legs in breast stroke		<ul style="list-style-type: none"> - standing drill (spread the legs) - rotating the knees inside - pointing the toes outside 	
analytical drill-5			<ul style="list-style-type: none"> - grasping the side of the pool - lying on the back or the front side - leg kicks (using an assistant) 	
analytical drill-6			<ul style="list-style-type: none"> - standing on one foot, - the other leg makes the kicks 	
analytical drill-6			<ul style="list-style-type: none"> - swimming on the back - shallow water (knees) - leaning with the hands on the bottom - (using an assistant supporting the head) - a more difficult exercise is lying on the front side 	
analytical drill-7			<ul style="list-style-type: none"> - swimming on the front side - the arms are extended, holding the partner by the hips (under the water level) - pulled forward by a partner - use leg kicks - with or without breathing 	

SKILLS AND DRILLS

leg drills in breast stroke

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-8			<ul style="list-style-type: none"> - holding a partner by the hips - swimming on the front side - arms extended - pushing the partner forward, with the kicks 	
analytical drill-9			<ul style="list-style-type: none"> - swimming on the front side - a partner pushes the swimmer backwards (push on the shoulders), - swim forward against the partner, start again - This exercise can also be performed against the wall, use a certain rhythm (pushing yourself away from the wall by extending the arms, returning back by kicking the legs) 	
analytical drill-10	to get the feeling of a firm resistance and a launching effect of the kick		<ul style="list-style-type: none"> - use a kicking board, the arms are extended - the feet are placed in the hands of the coach (the toes point away from each other and are approximately 30 cm from each other, the heels about 10 cm) - the swimmers gets ready to kick - on the sign of the coach the swimmer gives the kick 	
analytical drill-11			<ul style="list-style-type: none"> - use a kick board, arms extended on the board - form a floating arrow - once you are slowing down, add a leg kick and float again - a partner can help by pulling after the second stroke - ... 	
practising form-1			<ul style="list-style-type: none"> - lying on the back, use a kick board on the stomach - head out of the water, streamlined position - no breathing (working on a short distance) - or inhaling after three kicks 	
practising form-2			<ul style="list-style-type: none"> - holding on to a kick board and just work on a stretched and streamlined position. - arms extended - the hands are holding the kick board in the middle 	

SKILLS AND DRILLS

leg drills in breast stroke

level	additional purpose	outline	description of the exercise	information about the performance
practising form-3			<ul style="list-style-type: none"> - the head up, chin in the water, using the kick board - the arms are extended 	
swimming form-1			<ul style="list-style-type: none"> - one hand on top of the other, the palmside of the hand is in the water, the elbows are very close, the arms are extended - looking for a streamlined position - face stays continuously in the water, no breathing 	- the back of the legs up at the completion of the kick
swimming form-2	developing more power in the kick		<ul style="list-style-type: none"> - power kicking drill - the arms are extended - chin in the water, head up 	
swimming form-3			<ul style="list-style-type: none"> - head up - the hands behind the back, lock the thumbs - during the recovery of the legs, the heels must touch the hands before kicking - trying to put the shoulders as high as you can out of the water, developing a power kick 	
swimming form-4	feel the kick		<ul style="list-style-type: none"> - swimming on the back - the arms extended, elbows close, working on a streamlined position - the hands are on top of each other 	
swimming form-5			<ul style="list-style-type: none"> - left arm and right leg will swim breast stroke - the other arm and leg are extended - switch after one length 	
swimming form-6	a very strenuous, and hardworking drill		<ul style="list-style-type: none"> - power drill - arms are extended, chin in the water, head up - alternating each kick, one leg kicks then the other 	

SKILLS AND DRILLS

arm stroke and breathing in breast stroke

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1	spread out		<ul style="list-style-type: none"> - a standing drill, bend forward, shoulders in the water - in the beginning you just can bend forward, afterwards you can walk very slowly - use an assistant - he gives some resistance in the spreading of the arms 	<ul style="list-style-type: none"> - extended arm position under water - the hands can turn up through the stroke but they must be down before the catch is made. - try to keep the elbows up during the armpull - The pull is a press-out-and-press-in type of action - it's a sculling action more than a pulling action - each hand draws a football in the pool - the elbows follow the hands in the recovery to minimize resistance - the arm pull should be completed with the hands remaining in front of the shoulders, and the hands come together during the recovery or at the end of the pull - press out the arms slowly, keep the smallest finger up - the body stays mainly flat
analytical drill-2	keep the stroke up front		<ul style="list-style-type: none"> - lying on the side of the pool - use the arm stroke 	
analytical drill-3			<ul style="list-style-type: none"> - an assistant taking the swimmer in a wheel barrow position (watch out for the back) - use arm strokes 	
analytical drill-4	increase the resistance during the pull		<ul style="list-style-type: none"> - an assistant takes the swimmer by the feet - using arm strokes - the assistant pulls the swimmer backwards - continuous strokes ! 	
analytical drill-5	initiatie		<ul style="list-style-type: none"> - standing drill on the side of the swimming pool - body is bent forward 	
practising form-1			<ul style="list-style-type: none"> - swimming on the front side - using a pool buoy between the thighs 	
practising form-2	pulling drill		<ul style="list-style-type: none"> - using a regular car inner tube, put it around your body, just under the arms, up around the armpits - putting on the large inner tube is a very good way to learn the proper way to the pull, when the swimming pull is too far, the elbow will hit the inner tube and reminds the swimmer to keep that stroke up front. 	<ul style="list-style-type: none"> - the coach does not have to tell the swimmer anything, the inner tube does all the work. - with the inner tube you get a good reminder to keep that stroke up front
practising			<ul style="list-style-type: none"> - arm pulling drill 	<ul style="list-style-type: none"> - the instructor can also use a stick to touch the swimmer

SKILLS AND DRILLS

arm stroke and breathing in breast stroke

level	additional purpose	outline	description of the exercise	information about the performance
form-5			<ul style="list-style-type: none"> - using a small inner tube around the ankles, combine this with a little dolphin kick in the legs - the stroke has to be much in front, not behind the shoulders - the inner tube will lift the legs. It will become more difficult to lift the head (breathe each three strokes) 	when he is too far (after the shoulder line)
practising form-6	lifting the shoulders dolphin effect in the stroke		<ul style="list-style-type: none"> - pulling drill with fins - pick up the speed from the arm stroke and get a dolphin effect in the stroke (you can do this exercise with or without the fins) - try to bring the shoulders up each stroke - fins will get you an easy lift of the shoulders - one dolphin kick on one stroke! 	<ul style="list-style-type: none"> - develop a high shoulder lift, and a dolphin effect in the stroke. The shoulder is up and the dolphin kick will put you back over the hill. - using one dolphin kick in the full arm stroke
swimming form-1			<ul style="list-style-type: none"> - full breast stroke swimming - arms extended - the head stays down in the water - there is no breathing during three arm strokes - then you can inhale 	<ul style="list-style-type: none"> - the breathing is in a late part of the armpull - the arms start first after the legs - move the chin forward as you breathe and then start the recover so that you kick the last part of the stretching - during the recovery of the arms, the hands are a little bit deeper, which will lift the legs - stretch and hold the glide briefly at the end of each stroke and complete each kick before you start a new stroke.
swimming form-2			<ul style="list-style-type: none"> - a few strokes with the face in the water - one stroke with an inhale - try to concentrate on the breathing, there is plenty of time for exhaling 	
swimming form-3	nodding the head		<ul style="list-style-type: none"> - swimming the full stroke under a floating rope - nod the head to dive under the rope 	

SKILLS AND DRILLS

coordination in breast stroke

level	additional purpose	outline	description of the exercise	information about the performance
practising form-1			<ul style="list-style-type: none"> - standing drill in shallow water (at chest heighth) - the feet touch the bottom - the arm will start the stroke - then you stretch the legs and push off 	<ul style="list-style-type: none"> - the arms start first, and then the legs, - the breathing is in the late part of the arm pull - reach with the chin as you breathe and try to recover, so that you kick during the last part of the reach - stretch and hold the glide briefly at the end of each stroke, complete each kick before you start a new stroke
practising form-2	- shoulder lift / dolphin kick		<ul style="list-style-type: none"> - pulling drill with fins - pick up the speed from the arm stroke to get a dolphin effect in the stroke (you can do this exercise with or without the fins) - try to bring the shoulders up each stroke - fins will get you an easy lift of the shoulders - one dolphin kick during one stroke! 	
swimming form-1	the timing between the arms and the legs		<ul style="list-style-type: none"> - a slide kicking drill - arms are extended, the face in the water, the hands on top of each other - face in the water - the arms just bent, the hands remain on each other - there is a full kick - the kick is delivered through the last half of the reach 	<ul style="list-style-type: none"> - make sure that the kick is delivered at the last half of the reach - first bend the arms, when the hands get close to your head, the leg starts the recovery
swimming form-2	timing of the breathing		<ul style="list-style-type: none"> - as the previous exercise, but you can lift the head 	<ul style="list-style-type: none"> - one or two counts after the kick is completed, you can start the arm stroke (leaving the hands on top of each other) - inhale as the hands pass the chin in pray-position
swimming form-3	to build the armpull		<ul style="list-style-type: none"> - starting with a very small handstroke and gradually build up to a full stroking position 	
swimming form-4			<ul style="list-style-type: none"> - swim with a fist (half of the pool) and open it very slowly to develop a touch in the hands for breaststroke swimming 	

SKILLS AND DRILLS

coordination in breast stroke

level	additional purpose	outline	description of the exercise	information about the performance
swimming form-5			<ul style="list-style-type: none"> - one arm extended, one arm back - swim with just one arm, try to get the streamlining and stretch, keep the other arm stretched - after the half pool changes with the other arm 	- try to get the hips and the legs up high after each stroke
swimming form-6			<ul style="list-style-type: none"> - the same type of drill, but one arm extended and the other behind the body - one arm stroking - half way back switching hands 	
swimming form-7	streamlining drill		<ul style="list-style-type: none"> - both arms extended - you make three kicks with the arms fully extended - make two full stroke cycles - maintain a stretched and long stroke 	
swimming form-8	launching drill		<ul style="list-style-type: none"> - swim with the arm and the legs totally separated from each other - afterwards combine with the breathing 	

SKILLS AND DRILLS

leg drills in the back crawl

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1			<ul style="list-style-type: none"> - sitting on the edge of the pool - the kicking starts from the hips to develop a bent in the knee. The knee locks in the upward position. 	<ul style="list-style-type: none"> - very flexibile ankle, the feeling of kicking out a shoe - kicking out a loose shoe (a slipper) - trying to kick the water away from you, away from the swimmer
analytical drill-2			<ul style="list-style-type: none"> - look for the exercise drills of the crawl 	
practising form-1			<ul style="list-style-type: none"> - look for the exercise drills of the crawl 	Using a swimming board: <ul style="list-style-type: none"> - above the centre of gravity - above the chest - under the head - In the hands, with the arms extended in the water. By moving the floating point, you need more force in the leg stroke.
swimming form-1			<ul style="list-style-type: none"> - lying on the back in the water, an established head position - the arms at the side - a loose, flexible ankle - The hips stay up near the surface - the eyes are directed upwards 	
swimming form-2			<ul style="list-style-type: none"> - Both arms extended behind the back, the elbows are very close to each other - the body is completely extended - The head is in a backward position, the ears are in the water - The hips are high on the water surface - any splash is being directed from the toes, not from the knees. - The knees stay under the water surface - The fingertips stay on the water during the kick, the palm of the hand is in a upward position, the backside is on the water 	

SKILLS AND DRILLS

leg drills in the back crawl

level	additional purpose	outline	description of the exercise	information about the performance
swimming form-3			<ul style="list-style-type: none"> - One arm is back, one arm extended, and besides the body. - trying to get the shoulder (the extended arm) completely out of the water, ready for the recovery. It allows the swimmer to get the shoulder free of any water resistance during the stroke. - the head is in a stabilised position - the hips are high - the feet up near the surface, making white water 	
swimming form-4			<ul style="list-style-type: none"> - "make six and change" - starting with the same position of the previous exercise, but each six leg kicks the arms change position. Make six and make a recovery - the shoulder stays out of the water, getting used to keep the shoulder free during the back stroke - the head in a stabilised position - the only part of the body that is rolling are the shoulders, the head doesn't. 	- kicking is the success for back stroke swimming
swimming form-5			<ul style="list-style-type: none"> - the arms are extended - the hands are on top of each other (the palmside of the hand is upwards) - the swimmer maintains under water, in a streamlined position - kicking continuously without surfacing - the body is extended - the exercise asks a strong leg kick 	- You must try to keep under the water surface
swimming form-6			<ul style="list-style-type: none"> - in all the previous exercises we can use swim fins 	

SKILLS AND DRILLS

arm stroke and coordination in the back stroke

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1	using a correct position for the entry		<ul style="list-style-type: none"> - stroke with just one arm - lying on the edge of the pool, in the way o that one arm can make the stroke. - the recovery must be just outside the 12-o'clock position - a forced situation, the entry must be correct (outside the 12-o'clock position) otherwise you will hit the wall - the arm stays straight, and now bend halfway, under the shoulders region - the push ends with a rebound, a bounce into the next swimming stroke 	<ul style="list-style-type: none"> - The major difference with the crawl stroke is that the back stroke gets the arms constantly in the opposite of each other - there is no overlapping from the arms in the back stroke - The entry should be above the head but just outside the 12-o'clock position. - The hand entry should be with the smallest finger side - one arm pushes the other into the recovery
analytical drill-2			<ul style="list-style-type: none"> - the partner supports the swimmer in a backwards straight position, one arm is on the back - using one arm stroke 	
analytical drill-3			<ul style="list-style-type: none"> - the partner takes the swimmer in a wheelbarrow position. - exercising the full arm stroke - we are working in the shallow part of the pool 	
practising form-1			<ul style="list-style-type: none"> - using fins - full stroke 	
practising form-2			<ul style="list-style-type: none"> - full stroke - use a pull bouy between the thighs 	
swimming form-1	- developing the shoulder roll		<ul style="list-style-type: none"> - one arm stroke, the other is extended near the body - whenever the stroking arm enters the water, the opposite shouder lifts out of the water (only the shoulder, not the hand) = shoulder rolls as its hand enters 	<ul style="list-style-type: none"> - The arms bent halfway to the pull - The recovery of the arm is relaxed, the entrance in the water is with more force.

SKILLS AND DRILLS

arm stroke and coordination in the back stroke

level	additional purpose	outline	description of the exercise	information about the performance
swimming form-2			<ul style="list-style-type: none"> - just as the previous drill, but after the shoulder comes out of the water, the hand also does, doing a quarter of an arm lift and then returning back to its extended position (near the body) - when the stroking arm enters the water, he will lift the shoulder, followed by the arm - the other arm maintains the full stroke - the hip is high - the leg stroke is high near the water surface - the exercise asks a strong leg kick 	- By the recovery of the arm, the shoulder comes first out of the water, after that the arm.
swimming form-3			<ul style="list-style-type: none"> - just as the previous drill but doing it half way up. After this the arm returns back to its basic position - the leg kick must be maintained to keep the shoulders up and the hips in a high position. 	
swimming form-4	breathing		<ul style="list-style-type: none"> - swimming the full stroke, with the arms opposite - looking for a regular pattern for breathing. Develop a habit by inhaling on one arm and exhaling on the other 	
swimming form-5			<ul style="list-style-type: none"> - one stroke drill, the other is maintained, 45° position - try to keep the hips and the kick up - a very efficient drill (but very difficult) in order to develop a strong kicking drill 	
swimming form-6			<ul style="list-style-type: none"> - once the previous drill successfully performed, you can try to use a maintained arm position of 90° - the shoulder must be kept high out of the water 	
swimming form-7	stabilisation of the body		<ul style="list-style-type: none"> - swimming the full back stroke - putting a little rock on the forehead of the swimmer - this is an important exercise to acquire a stable head position 	

SKILLS AND DRILLS

arm stroke and coordination in the back stroke

level	additional purpose	outline	description of the exercise	information about the performance
swimming form-8	<ul style="list-style-type: none"> - vertical arm recovery - entry of the hand 		<ul style="list-style-type: none"> - the double arm recovery - asking a strong kicking position - the head must be back and stable - a vertical recovery is necessary to get the shoulders out of the water - in the first part of the recovery, the arms can stay together (the hands can touch), afterwards (and above the head), they can separate - the hand entry is just outside the 12-o'clock position 	
swimming form-9	develop the feeling of the water		<ul style="list-style-type: none"> - a closed, fist drill - after 10m we slowly and gradually open the hand to a full stroking position and feel the water in the stroke 	
swimming form-10	entry just outside the 12-o'clock position		<ul style="list-style-type: none"> - a spinout drill - swimming the full stroke, - the swimmer strokes as fast as he can get his arms moving - the swimming position is a sit-position (a bath top position) - after 8m the speed is regressively going down from 110% to 80% - when the swimmer is working on 110%, he is not concerned of getting any speed out of his stroke - in the beginning, the head is high out of the water (sit-position), afterwards it goes into a flat position - In this exercise the swimmer can never enter his hands inside the 12-o'clock position - when the movement becomes slower, you must try to maintain the stroking position (outside the 12-o'clock position) 	
swimming form-11	bent-arm pull stroke		<ul style="list-style-type: none"> - a full stroke, pull with one arm just aside a rope - using a rope on the surface of the water - grasping the rope and pulling the body past the rope, we 	

SKILLS AND DRILLS
arm stroke and coordination in the back stroke

level	additional purpose	outline	description of the exercise	information about the performance
			develop a natural arm bent in the middle of the pull	

SKILLS AND DRILLS

the dolphin kick in the butterfly

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1	initiate		<ul style="list-style-type: none"> - making dolphin kicks in the shallow part of the pool - you start with the arms extended up 	<ul style="list-style-type: none"> - emphasize the nodding of the head in the dolphin kick - do not forget to put the chin in front during the breathing
analytical drill-2			<ul style="list-style-type: none"> - making dolphin kicks in the shallow part of the pool - you start with the arms against the body (making the recovery of the arms) 	
analytical drill-3			<ul style="list-style-type: none"> - dolphin kicks over a rope, or through a hoop 	
practising form-1			<ul style="list-style-type: none"> - the same exercises, using fins 	
practising form-2			<ul style="list-style-type: none"> - using fins - making dolphin kicks on the side, one arm extended up, the other near the body 	
swimming form-1			<ul style="list-style-type: none"> - swimming on the front side - arms extended up - making dolphin kicks - starting with a little dolphin jump will make the stroke easier, because of the speed at the beginning - do not mention the breathing 	
swimming form-2			<ul style="list-style-type: none"> - same exercise with the hands back - the head is leading the dolphin kick - for breathing; lift the chin 	<ul style="list-style-type: none"> - the dolphin kick is just like a rope, it starts with the head and stops in the toes

SKILLS AND DRILLS

leg drills in the butterfly

type oefening	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1			<ul style="list-style-type: none"> - grasping the side of the pool - the head is up, the chin is in the water - making kicks 	<ul style="list-style-type: none"> - maintain a continuous kick - bend the knees on the upkick and extend the legs on the downkick - the legs remain close together during the kick, especially during the bottom of the kick - the hips will lift as the swimmer completes the down kick - try to keep the kick into the water
practising form-2			<ul style="list-style-type: none"> - the arms on the kick board - head up, the chin is in the water - the kick is shallow but continuous - at the end of the downkick, the hips rise 	
practising form-3	develop a very strong second kick		<ul style="list-style-type: none"> - arms extended up, on the kick board - the head is up - develop a little more power in the second kick - the instructor just calls it out; "BENT - POWER" 	
practising form-4			<ul style="list-style-type: none"> - the fins can be used on any of the kicking drills 	
swimming form-1			<ul style="list-style-type: none"> - arms extended, hands on top of each other - face in the water 	<ul style="list-style-type: none"> - maintain the kick continuous in the butterfly
swimming form-2			<ul style="list-style-type: none"> - one arm is extended (the nearest to the bottom), the other on the back - swim butterfly kicks on your side - you can do the same exercise with both the hands on the back (thumbs crossing) on the back 	
swimming form-3	a continuous kick		<ul style="list-style-type: none"> - the arms behind the back, face in the water (thumbs crossing) - a very slight nodding with the head 	
swimming form-4	a continuous kick		<ul style="list-style-type: none"> - same type of drill, but add the breathing - every four kicks you try to breathe without breaking the kicking rhythm (do not slow down or stop it) 	

SKILLS AND DRILLS

leg drills in the butterfly

type oefening	additional purpose	outline	description of the exercise	information about the performance
swimming form-5	power kick		<ul style="list-style-type: none"> - power kick - arms extended (or arms behind his back) - head up, chin in the water 	
swimming form-6			<ul style="list-style-type: none"> - lying on the back, arms extended behind the head (another exercise is with the hands on the side) - making the dolphin kick 	
swimming form-7			<ul style="list-style-type: none"> - arms extended, hands on top of each other - under water kicking drill - just using the kick 	
swimming form-8			<ul style="list-style-type: none"> - just the same but putting the arms side you - making a very small nodding with the head 	

SKILLS AND DRILLS

arm stroke, coordination and breathing in the butterfly

level	additional purpose	outline	description of the exercise	information about the performance
analytical drill-1			<ul style="list-style-type: none"> - standing drill, the body bent forward - afterwards we can change into a walking drill 	<ul style="list-style-type: none"> - the elbow and shoulder start the recovery process - stroke simultaneously - the elbows slightly higher than the hands on the body
analytical drill-2			<ul style="list-style-type: none"> - skipping while the body is bent forward - using the arm stroke of the butterfly - make a simulation of the butterfly 	<ul style="list-style-type: none"> - arms stroke - during the recovery the palms face the water especially on the second half of the recovery - during the final part the palm should be down - enter near the shoulder width - enter through the thumbside of the hand - accelerate the recovery so that you fall downhill on the entry - the pull is a slight keyhole action (out a little, in and then back) - finish the pull by rounding the hands to the outside so that you can easily get them into the recovery - enters with the hands, wrist and elbow - the elbow remain high in the underwater pull - the armstroke of the butterfly is just a combination of breaststroke and crawl. Starting the first part with press-out-action of breaststroke and finishing with the pulling action of crawl - the arms must not rest at the end of the push. Oblige them to push the hands quickly and highly out of the water
analytical drill-3			<ul style="list-style-type: none"> - using the same exercise in combination with a breathing pattern 	<ul style="list-style-type: none"> - the breathing should take place on the back half of the arm pull (late in the pull) - breathe by lifting the chin slightly forward, the breath should be taken with the chin cutting an edge in the water - nod the head after breathing, the chin is down after breathing before the hand entry is made
practising form-1			<ul style="list-style-type: none"> - all exercises can be performed with fins or with a pool bouy between the thighs 	

SKILLS AND DRILLS

arm stroke, coordination and breathing in the butterfly

level	additional purpose	outline	description of the exercise	information about the performance
swimming form-1	coordination of the breathing		<ul style="list-style-type: none"> - one arm forward, the other swims the butterfly stroke without breathing - gradually add side breathing through the stroke 	<ul style="list-style-type: none"> - correct timing of breathing, at the end of the push - only when there is a correct timing with breathing on the side, you can switch breathing in the front - the first down kick is combined with spreading of the arms, the second on the end of the push (just before the recovery)
swimming form-2			<ul style="list-style-type: none"> - once the swimmer has 's got the timing of the side breathing, switch over to breathing forward - take a breath in the back half of the push 	
swimming form-3			<ul style="list-style-type: none"> - the same drill with one arm back (it will shorten the stroke) - first you can try breathing at the side, each two strokes - 1E stroke, no breathing 2E stroke, breathing on the side 3E stroke, breathing in the front 	
swimming form-4			<ul style="list-style-type: none"> - combine a under-water-kicking drill with a full stroke - kick about 6m continuously without breathing, arms extended - then going into a full stroke without changing the pace 	
swimming form-5	1E downkick after the entry		<ul style="list-style-type: none"> - combine the armstroke of crawl with the leg kick of butterfly - after the entry there is a downkick - the breathing is on the side 	
swimming form-6	take away the pressure of full strokes for the entire distance		<ul style="list-style-type: none"> - right arm, left arm full stroke drill - two strokes on one side, one arm extended, and then two strokes on the other side one arm extended, and then move to two full strokes, back starting with two strokes on one side and one arm extended, ... - the breathing is on the side 	
swimming form-			<ul style="list-style-type: none"> - one arm stroke of butterfly, the other arm is on the back - each armstroke takes two kicks 	

SKILLS AND DRILLS

arm stroke, coordination and breathing in the butterfly

level	additional purpose	outline	description of the exercise	information about the performance
7			- the breathing is in front	
swimming form-8			- making the key hole from breaststroke under water - make a kick after the entry and in the push - the stroke is under water, no breathing	- the legs shouldn't be bent
swimming form-9			- full arm-stroke of the butterfly combined with the kick of crawl - breathing each two or three arm strokes	
swimming form-10			- full butterfly stroke, but floating after one full stroke, after two full strokes, after three fulls strokes, ...	
swimming form-11	a sensitivity of the water in the hands		- the butterfly with just the fists (20meter) - you cannot utilise the entire hand, - gradually open the hand	