



Welcome to Outpace Workouts

Is this plan the right level for me?

The correct plan should allow you to do 6 to 10 (depending on the level) x 100 Freestyle swimming, at your best possible constant pace, throughout the entire set with about 5 to 10 sec. rest between repetitions.

In the first session of this plan (Week 1 – Session 1), there is a test set which should tell you if you are at the right level.

In this test set, if you had more than 10 seconds rest between each repetition, then you should move up to a faster level. If you had less than 5 seconds rest between more than two of the 100's or you could not start some repetitions on time, then you should switch to an easier level / plan.

Consistency of pace during the set is important. If you swim the first few 100's too fast, you will likely get over 15 seconds rest between each 100 then you may encounter difficulties finishing the set (e.g. less than 5 seconds rest or even missing the start of the following 100's).

To ensure that you are currently using the most appropriate workout plan, I would recommend you do the **Critical Swim Speed (C.S.S.) test periodically** (e.g. every 8 to 12 weeks) as you should theoretically improve your fitness through the season. Check www.outpaceswimworkouts.com for further details.

Frequency of training

Research has shown that to develop endurance, we need a minimum of three training sessions per week, and to maintain fitness, we need two sessions, as long as they are relatively intense.

If you haven't swum for a long time, I would recommend starting with two sessions per week and over time, progressively increase the number of training sessions.

Each plan offers three weekly workouts. Feel free to adapt and use the plan in a way that suits your individual needs.

The intensity and paces of the swim sets increase progressively throughout the yearly program to ensure a constant progression and an opportunity to jump into the next level.

Always consult your doctor before starting the program.

Understanding the workouts

The sessions can be adapted to any pool size from 25 to 50 meters or yards, wherever you are in the world.

Sets that include 25's, 75's or 125's would require modification for a 50 meter pool. In a 50 meter pool, these distances take the swimmer to the middle of the pool. In this case, you can either push off the bottom of the pool to start the next repeat or do a "dead start" from the middle of the pool. If you prefer, you can also do 50s instead of 25s and adapt the intervals accordingly.

Warm-up

The warm-up is important. Even if you have less time to train, avoid shrinking them. A good warm-up is also endurance work which will prepare your body for the increased intensities in the main swim set.

Often, warm-ups include drills. You are free to choose the drill(s) you want, if you have a specific area of your stroke that you wish to focus on, or improve.

Main set

The main set is the goal of your workout and can be focused on different areas.

In the yearly training plan, the three weekly sessions are usually as follows:

Session 1 is usually a C.S.S focus (solid pace) with varied intensities

Session 2 is more endurance orientated with longer distances and sets

Session 3 offers more diversity including kicks and mixed strokes

If you are unable to do one of the strokes, feel free to do Freestyle or another stroke instead. Please refer to the following terminology for more details about strokes.

Pull / Paddles set

In this upper body workout section, you have the choice to use a pull buoy only, just paddles or both together.

Be careful with paddles as they can sometimes put too much stress on your shoulders. Even if you train with paddles at the end of your training, stay focused on maintaining the best technique possible.

If you are not used to swimming equipment, I would recommend starting by using a pull buoy only and then in the longer term, using hand paddles only. Eventually, using both pull buoy and paddles together will give you a stronger workout. Varying equipment reduces the likelihood of repetitive strain injuries and adds interest.

If you are unable to use swimming equipment, feel free to change the pull set in a swim set or add more lengths in your main set instead.

Warm down

Warm downs are usually not included in the workouts. However, they are important and will help you to recover faster before your next training. Depending on how much time you have left, try to swim at least 100m in a warm down.

Understanding paces and effort levels

Paces	Paces per 100	What you should feel and focus
Easy	C.S.S. + 7 to 10 seconds	<p>Can hold this pace for a very long time.</p> <p>Focus on a good technique but in the most relaxed way possible.</p> <p>Focus on a nice and high elbow position.</p>
Steady	C.S.S. + 5 seconds	<p>You should still feel good and be enjoying a pace that you could use for a long time (e.g. one hour, depending on current fitness).</p> <p>You should be able to maintain an efficient technique without suffering.</p> <p>Focus on distance per stroke with a stronger catch.</p>
Solid	C.S.S. pace	<p>Helps build endurance and strength.</p> <p>This pace requires you to optimize your distance per stroke and stroke rate as best you can.</p> <p>Focus on a very strong catch & pull as well as increasing your stroke rate (frequency) without losing your distance per stroke too much.</p> <p>The intensity should be high and constant from the first repetition to the last repetition of the set.</p> <p>The idea is to progressively increase the total distance and duration at that pace towards the competitive season (e.g. from 10 x 100 to 20 x 100 to 30 x 100...).</p>
Hard	C.S.S. less 5 seconds	<p>The goal is to give lots of power and strength in your strokes with a higher stroke rate.</p> <p>You can't hold this pace for a long time due to the lactate (lactic acid) being built up in the muscles faster than it is being eliminated.</p> <p>Focus on maintaining a good technique throughout the whole set especially when your body gets tired.</p> <p>Losing the technical focus at this pace, will lead to an inefficient stroke and consequently, a loss of speed. A good way to control this is to maintain a good distance per stroke or avoid adding more than two extra strokes per length.</p> <p>This pace requires longer rest time / intervals and recovery.</p>
Fast	N/A	<p>The goal is to give the maximum power and strength over a short distance while keeping your strokes long. The stroke rate is at its maximum. Maintaining your streamline and a good technique is also crucial at this speed to maintain efficiency and avoid developing injuries.</p>

Understanding send-off intervals

Constant pace and rest are the foundation for developing your endurance and are best accomplished by swimming intervals. This ensures consistency and accountability of swimming pace and rest.

All main sets and pull sets on this plan are on send-off intervals.

This means you focus on when you start each repetition, not on the amount of rest in between.

Training with intervals is far more beneficial for developing your endurance than doing repetitions based on how much rest you want to get after each swim.

To manage send-off intervals, you will need either a pace clock or a watch.

Send-off interval = swim + rest

The rest time is included in the send-off interval.

E.g. In a set of 6 x 100 on 2'00, each 100 is an interval within the set. This means that you have 2 minutes to complete a 100 before you begin the next one.

The rest time varies in duration depending on the specific aims of the set, e.g., endurance, power, speed...

Usually the more intense or the faster the swim pace, e.g. solid, hard or fast, the longer rest therefore the longer interval you get.

On the other hand, if you are swimming at easy or steady pace, the chances are that the send-off intervals won't allow you much more than 10 seconds rest most of the time.

More information about the pace clock and different send-off intervals such as descending sets are explained from page 10 to 13 of this manual.





Workout example explained

Pull means that you are using a pull buoy only (without paddles).

For each 100, do 50 Backstroke, 25 Breaststroke and 25 Freestyle

Take about 10 seconds rest between each 100

Choose any type of kick (Freestyle kick, Backstroke kick, etc.) and can change the type of kicks any time.

Up to 30 seconds rest between blocks

In this main set, there are 6 blocks:

(6 x 100), (3 x 200), (6 x 75), (3 x 150), (6 x 50) and (3 x 100)

Pull (Paddles) is mostly an upper body workout. You can either choose to use a pull buoy only or just paddles or even both pull buoy and paddles.

Descend 1 – 3 means that each consecutive 200 gets faster. Your swim time decreases throughout the set.

Option:

You have the choice to manage your pace depending on the day (fitness or motivation).

E.g. 3 x 200 as 1 easy, 1 steady, 1 solid (CSS pace) or start faster as 1 steady, 1 solid, 1 hard.

When you have an I.M. (Individual Medley) set, we usually follow the usual I.M. stroke order which is Butterfly, Backstroke, Breaststroke & Freestyle.

In this set, there is no Freestyle, so swim the set as follow:

1st & 4th 50 are Butterfly swim

2nd & 5th 50 are Backstroke swim

3rd & 6th 50 are Breaststroke swim

All 50's intervals are on a one minute send off

Warm-up:

- The 1st and 4th 100 as Freestyle swim
- The 2nd and 5th 100 as 50 Freestyle drill of your choice + 50 Freestyle swim focusing on long distance per stroke
- The 3rd and 6th 100 is using a stroke of your choice other than Freestyle.

E.g. 100 Backstroke or alternating 25 Backstroke & 25 Breaststroke...

Take about 10 seconds rest between each 100

Week x – Session x

Warm-up:

6 x 100 (R:10") as:

#1,4: Freestyle

#2,5: 50 Free drill / 50 Free D.P.S.

#3,6: Stroke(s)

4 x 100 Pull as 50 Back / 25 Breast / 25 Free (R:10")

6 x 50 kick choice on 1'10

Main set: up to 30" rest between blocks

6 x 100 on 1'45 as:

#1,4: 25 Fly / 75 Free

#2,5: 25 Back / 75 Free

#3,6: 25 Breast / 75 Free

3 x 200 Free Pull (Paddles) descend 1 – 3 on 3'00

6 x 75 on 1'20 as:

#1,4: 25 Fly / 50 Free

#2,5: 25 Back / 50 Free

#3,6: 25 Breast / 50 Free

3 x 150 Free swim descend 1 – 3 on 2'15

6 x 50 I.M. swim (No Freestyle) on 1'00

3 x 100 Free swim as 50 hard / 50 easy on 1'45

Total: 4000

On 3 minutes
send-off
interval

For each of the three 100's, swim the first 50 at hard pace (about five seconds faster than your critical swim speed) and the second 50 at easy pace.



Workout example explained

There are 4 rounds of 150

Each 150 is broken into three 50's

The odd sets (1st and 3rd set) are in Freestyle

- 50 Freestyle kick
- 50 Freestyle drill of your choice
- 50 Freestyle swim

The even sets (2nd and 4th set) are in Stroke which means you choose one or more strokes other than Freestyle.

For example, the 2nd set can be:

- 50 Backstroke kick
- 50 Backstroke drill of your choice
- 50 Backstroke swim

The 4th set could be in Breaststroke

Take 5 seconds rest between each 50

In this main set, the 12 x 75 are divided into 4 rounds of three 75's.

Once you have done the 1st round (three 75's), you start another round of the three 75's.

Each 75 has as a send-off interval (start) of 1 minute and 15 seconds. This means that if you swim a 75 in 1 minute, then you have 15 seconds rest before the next 75.

Do the first three 100's at easy pace, the next three 100's (4th, 5th & 6th) at steady pace, the following three 100's (7th, 8th & 9th) at solid pace and the last three 100's are hard pace.

Interval start is on 1 minute and 30 seconds.

Warm-up:

It's a continuous 500, broken into 5 sets of 75 Freestyle swim + 25 of the stroke of your choice apart from Freestyle

Week x – Session x

Warm-up:

500 as 5 x (75 Free / 25 Stroke)

4 x (50 kick / 50 drill / 50 swim) – R:5" / 50

Odd sets: Freestyle

Evens sets: Stroke

Main set:

12 x 75 swim on 1'15 as 4 rounds of:

4 x { 75 as 25 Stroke / 50 Free
75 Freestyle as 25 fast / 50 easy
75 Freestyle built

12 x 100 Freestyle swim on 1'30 as:

#1 – 3: Easy
#4 – 6: Steady
#7 – 9: Solid
#10 – 12: Hard

Pull / Paddles Freestyle set:

4 x 200 on 3'00 / 2'55 / 2'50 / 2'45

Total: 4000

Pull (Paddles) is mostly an upper body workout.

You can either choose to use a pull buoy only or just paddles or even both pull buoy and paddles.

In this set, the 3'00 / 2'55 / 2'50 / 2'45 means that your send-off interval decreases during the set.

The 1st 200 is on a 3 minute interval, the 2nd 200 is on a 2 minutes and 55 seconds interval, etc.

There are different ways to do this set:

- 1) You swim each subsequent 200 five seconds faster, then get the same amount of rest each time.
- 2) Or, you choose to set a fixed pace (e.g. 2'40) for all 200's and get progressively less rest.

Workout Terminology



100:

Means swimming a straight 100 meters or yards in a row without stopping between the lengths.

Meter versus Yard:

Distances in yards are approximately 10% shorter than meters distances.

Adding 5 seconds per 50 meters to each interval is a good rule of thumb for more accurate trainings.

Preset:

A series of shorter intervals designed to elevate heart rate in preparation for the main set.

Set:

One group of repetitions. E.g. 10 x 100

Send-off interval: “swim + rest”

The rest time is included in the send-off interval. This means you focus on when you start each repetition, not on the amount of rest in between.

E.g. In a set of 6 x 100 on 2'00, each 100 is an interval within the set. This means that you have 2 minutes to complete a 100 before you begin the next one.

On 1'00:

Start every send-off interval after 1 minute has passed since the start of the previous interval.

E.g. If you were swimming a set of 50's and completing each interval in 50 seconds (50"), you would have 10 seconds (10") rest before the next interval

R: 10":

Means 10 seconds of rest (usually between intervals)

Swim:

Swimming the full stroke using legs and arms

Workout Terminology



Stroke:

Any stroke that is NOT Freestyle

Free (Fr) / Back (Bk) / Breast (Br) / Fly:

Abbreviations for Freestyle / Backstroke / Breaststroke / Butterfly

I.M.:

Short for Individual Medley. This refers to the 4 swimming strokes in this order: Butterfly, Backstroke, Breaststroke, and Freestyle.

D.P.S.:

Short for Distance Per Stroke. Main focus is on covering more distance per stroke over the same distance or time.

In freestyle and backstroke, emphasize a long bodyline, hip and shoulder rotation, minimizing resistance. With breaststroke and butterfly, keep the bodyline long in the front of your stroke.

Drill:

Unless a specific drill is mentioned in the workout, you may choose the drill that you like.

A "drill" refers to anything that emphasizes one aspect of the stroke to help improving your technique.

E.g. single-arm drill, fingertips drag drill, doggy paddle, etc.

Pull / Paddles:

To help build upper body and core strength and improve pelvic control for better body alignment.

Place the pull buoy between your legs at the top of your thighs or between ankles.

Only use arms – No kicking !

Paddles are optional. To avoid injury, they should only be used with a correct swim technique and when you have built sufficient strength.

Hypoxic:

To help build lung capacity and becoming more comfortable in the water by changing and challenging your regular breathing patterns.

E.g. **300 m/yd. Hypoxic 3/5/7.** This means swimming a straight 300 m/yd. Freestyle. On the first length, breathe every 3rd stroke, on the second length, breathe every 5th stroke and on the third length, breathe every 7th stroke. Repeat this pattern until the 300 m/yd. is completed.

Workout Terminology



Descend:

Each consecutive swim gets faster. Your swim time decreases.

Examples:

4 x 100 descend 1 – 4 means you swim four 100's with each one getting faster.

8 x 100 descend every 1 – 4, 5 – 8 means you swim the first four 100's (1-4) with each one getting faster and repeat this for the second four 100's (5 – 8) in the set.

E.g. This set could be done as the first 100 at easy pace, second 100 at steady pace, third 100 at solid pace, fourth 100 at hard pace then the 5th 100 easy, the 6th 100 steady, the 7th 100 solid and the 8th 100 hard.

Build:

This term refers to a steady increase in effort during the given distance.

E.g. **4 x 100 build** means starting each 100 at easy pace then building your effort to medium pace near the middle and finally increasing to a faster pace as you approach the end of the 100 m/yd.

The goal in a "build" swim is to build speed while maintaining good stroke technique.

When I swim a 100 build, I usually do the 1st 25 easy, the 2nd 25 focused on D.P.S., the 3rd 25 building power and strength throughout the propulsive phase while maintaining D.P.S. The 4th 25 is about increasing stroke rate while maintaining a good D.P.S.

Negative Split:

This means to do the second half of the swim faster than the first half.

E.g. **4 x 200 negative split** means you will swim the second 100 at a faster pace and time than the first 100. The goal is to control your pace at the beginning of the swim so that you have the energy necessary to swim faster at the end of the swim.

"Loco" Set:

A "loco" set (short for "locomotive"), is a progression of alternating easy laps with faster laps to produce a fartlek effect. The faster laps should be done at a controlled, higher intensity, while the easy laps are used for recovery. It's important to continue swimming, without stopping, throughout these swims.

E.g. In a 1000 loco swim, you will begin with 25 easy/25 fast, then continue with 50 easy/50 fast, 75 easy/75 fast, 100 easy/100 fast, 100 easy/100 fast, 75 easy/75 fast, 50 easy/50 fast, and finally 25 easy/25 fast.

Understanding the pace clock

It is essential to use the pace clock if you want to progress in swimming.

The pace clock will allow you to:

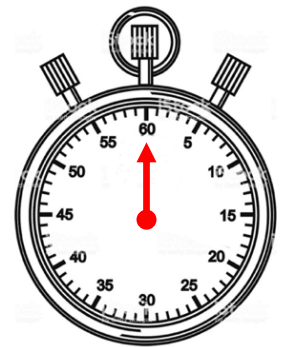
- Be autonomous at controlling the times yourself
- Control your effort, paces and intervals
- Gain experience working toward your goals

Controlling pace is the ability to swim at a certain speed for a certain distance or time and takes a longer time to master. It is a matter of swimming repeat distances on a fixed time to see if you can “*make the interval*”, i.e., hit the target time, consistently and repeatedly.



How to use the pace clock

The most common way to start a swim set is when the hand reaches 60 (“on the top”)



1st: Learn to time yourself

Knowing your speed is the first step. The easiest way to get your time is to leave on “the top”, when the hand gets to the 60 (or sometimes 00). After you’ve swum the distance that you want to time, glance back up at the clock. This will help you determine what your time is.

For example, if the hand was at 40 when you touched the wall, that means you swam the length in 40 seconds.

It gets more complicated if you leave the wall at a different time.

For example, if you left the wall on the 10 and touched the wall on the 55, then you’ll have to do some simple math to figure out your time. E.g. $55 - 10 = 45$ This means you swam the length in 45 seconds.

2nd: Use the clock for your swimming sets and send-off intervals

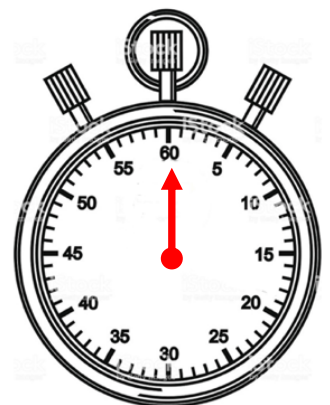
Another instance where you’d use a pace clock is if you’re using send-off intervals in practice.

For example, 10 x 50 meters Freestyle on 1’00 means swimming each 50 meters starting every one minute. You start when the first 50 meters is on 60 (or 00) and when the following 50 meters are on 60 (or 00) again.

Here are some practical examples of using the clock:

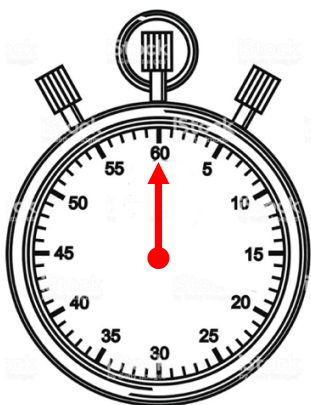
Swimming 100’s on 2’00:

If you start the first length on 60 (or 00), then you start each subsequent 100 on 60 (or 00).

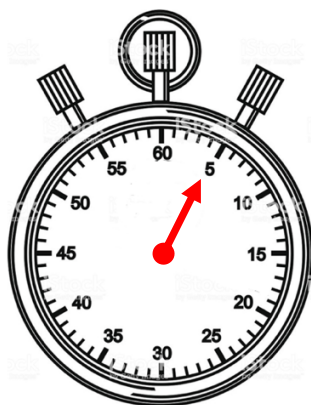


Swimming 100's on 2'05:

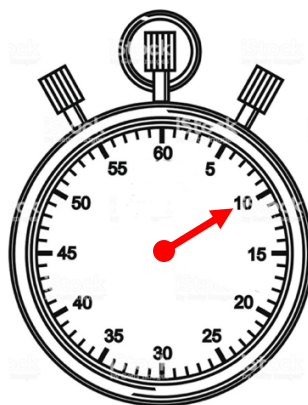
Simply add five seconds at the clock for each repetition. E.g., you start of the first 100 on 60 (or 00), the second when the hand is on 05, the third 100 when the hand is on 10, the fourth on 15, etc.



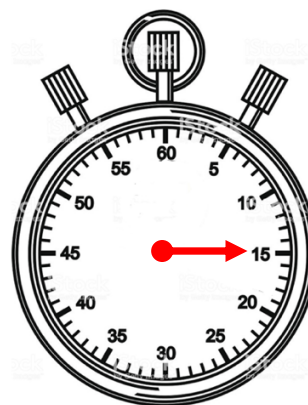
1st 100 starts on 60



2nd 100 starts on 5



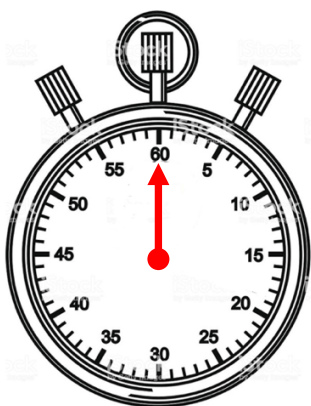
3rd 100 starts on 10



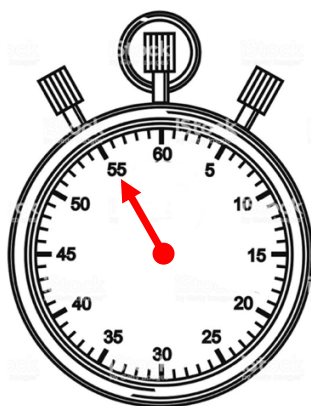
4th 100 starts on 15

Swimming 100's on 1'55:

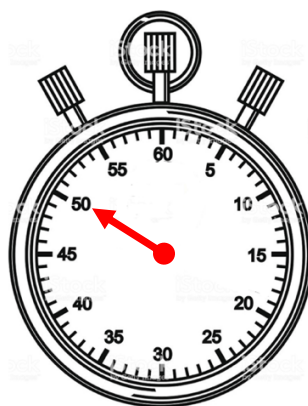
In this case, simply subtract five seconds from the previous start. E.g., you start your first 100 on 60 (or 00), the second 100 on 55, the next 100 on 50, the next 100 on 45, etc.



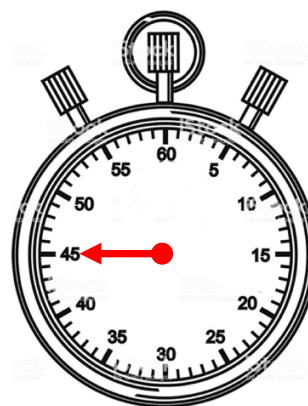
1st 100 starts on 60



2nd 100 starts on 55



3rd 100 starts on 50



4th 100 starts on 45

Descending send-off intervals:

This means that your send-off interval decreases during the set.

Example: 4 x 100 on 2'00 / 1'55 / 1'50 / 1'45

In this example, the first 100 is swum on a 2 minutes send-off interval, the second 100 on a 1 minute and 55 seconds (1'55) send-off interval, the third 100 on 1 and 50 seconds (1'50) send-off interval and the fourth 100 on 1 minute and 45 seconds (1'45) send-off interval.

See the details below:

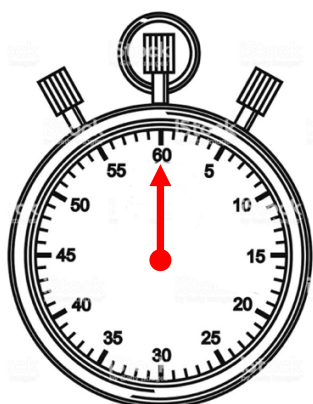
1st 100: Start the first 100 when the **hand is on 60** (or 00),

2nd 100: Start the 2nd 100 when the hand is on 60 (or 00) as the first 100 as on 2'00 send-off

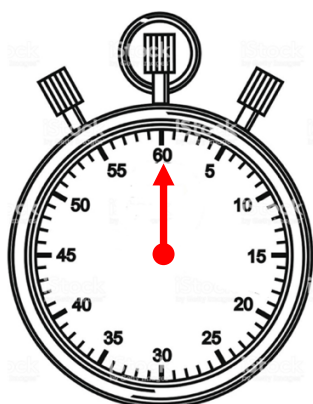
3rd 100: Start the 3rd 100 when the **hand is on 55**. *Subtract 5 as the second 100 is on 1'55 (2'00 – 1'55 = 5")*

4th 100: Start the 4th 100 when the **hand is on 45**. *Subtract 10 as the third 100 is on 1'50 (2'00 – 1'50 = 10")*

If there was a fifth 100, you would then start it when the hand is on 30 (as on 1'45 send-off)



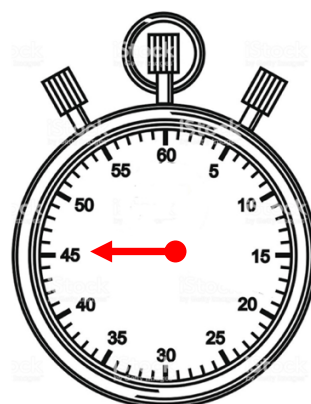
1st 100 starts on 60



2nd 100 starts on 60



3rd 100 starts on 55



4th 100 starts on 45

There are different ways to do this set:

Option 1: Descending send-off intervals and descending times

In this option, you swim each 100 five seconds faster than the previous ones so you get the same amount of rest each time.

Example:

1st 100 on 2'00 send-off interval at 1'50 pace = you get 10 seconds rest

2nd 100 on 1'55 send-off interval at 1'45 pace = you still get 10 seconds rest

3rd 100 on 1'50 send-off interval at 1'40 pace = you still get 10 seconds rest

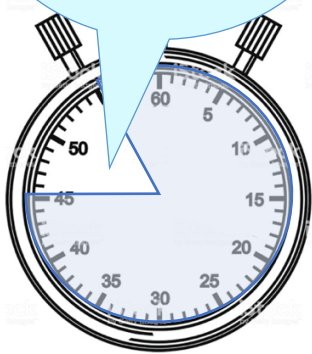
4th 100 on 1'45 send-off interval at 1'35 pace = you still get 10 seconds rest if you were continuing the set.

Start on 60, arrive
on 50 (1'50 pace)
You get **10 seconds
rest** as the send-off
is on 2'00



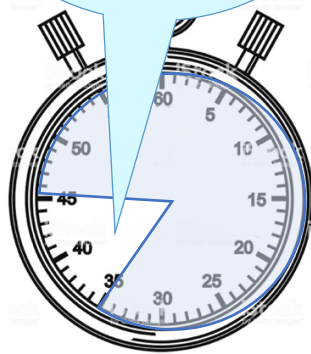
First 100

Start on 60, arrive
on 45 (1'45 pace)
You get **10 seconds
rest** as the send-off
is on 1'55



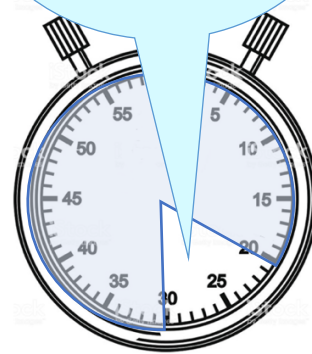
Second 100

Start on 55, arrive
on 35 (1'40 pace)
You get **10 seconds
rest** as the send-off
is on 1'50



Third 100

Start on 45, arrive
on 20 (pace 1'35)
You get **10 seconds
rest** if continuing
the set.



Fourth 100

Option 2: Descending send-off intervals with a fixed pace

From the above example, you swim each 100 with a fixed pace, e.g., 1'40 (1 minute and 40 seconds) and get progressively less rest throughout the set.

Example:

1st 100 on 2'00 send-off interval at 1'40 pace = you get **20 seconds rest**

2nd 100 on 1'55 send-off interval at 1'40 pace = you get **15 seconds rest**

3rd 100 on 1'50 send-off interval at 1'40 pace = you get **10 seconds rest**

4th 100 on 1'45 send-off interval at 1'40 pace = you get **5 seconds rest** if you were continuing the set.

