

SWIMMING NOTES AND ABBREVIATIONS

Training Zones:

Level		Heart Rate Level (% of max)	Personal Heart Rate Range (bpm)	Perceived Effort (1 – 20)	Description
L1	Easy / recovery	60 – 65		6 – 10	Very easy – could maintain this pace for hours
L2	Lower aerobic endurance	65 – 70		10 – 12	Easy – could maintain this pace for about an hour
L3	Upper aerobic endurance	70 – 75		12 – 14	Steady – could maintain this pace for about ½ hour
L4a	Threshold endurance	75 – 80		14 – 16	Starting to feel quite hard, but could maintain for 10mins +
L4b	Overload endurance	80 – 85		16 – 18	Hard, can only maintain for a few minutes
L5	Maximum effort	85 +		18 – 20	Very hard, can only maintain for seconds

Estimating your individual heart rate ranges

Your heart rates corresponding to the percentages given in the table above can be estimated as follows:

$$HR = \frac{\% \text{ of max}}{100} \times (HR_{\text{max}} - HR_{\text{rest}}) + HR_{\text{rest}}$$

Where HR is your heart rate in bpm (beats per minute), HR_{max} is your maximum heart rate, and HR_{rest} is your resting HR.

Your HR_{max} can be estimated as 220 – YOUR AGE (in years).

Your HR_{rest} can be taken first thing in the morning before you get out of bed.

For example, a 30 year old triathlete with a resting heart rate of 50 bpm:

HR_{rest} = 50 ; HR_{max} = 220 – 30 = 190 ; and the 60% of max heart rate is equal to:

$$HR = \frac{60}{100} \times (190 - 50) + 50 = (0.6 \times 140) + 50 = 134 \text{ bpm}$$

There is a blank column in table above, and in the training sheets to allow you to fill in your individual values. Alternatively, you can equally well use the simpler method of perceived effort to gauge your training intensity.

SWIMMING ABBREVIATIONS

R10s	rest interval of 10 seconds between repetitions
swim	swim front crawl
pull	pull using a pullbuoy
kick	kick
o/c	own choice of stroke
drill	see table on next page
P, PB, B	paddles, pull buoy, ankle band
br	breathing pattern, e.g. 2,4,6 means breath alternate lengths every 2, 4 and 6 strokes
weaksid	breath to your weaker side (if you don't have one, breath to both sides)
f/c, b/c, br/s	frontcrawl, backcrawl, breast-stroke
reducing	get faster on each repetition
build	get progressively faster throughout a single repetition
12.5 fast - 12.5 easy	12.5 m fast swimming followed by 12.5 m easy
swimming	
open turn	turn without touching the wall or floor of the swimming pool
MAX	Maximum effort
negative split	swim the second half of the repetition faster than the first half
stroke count	number of individual arm strokes taken per length
open & close	start and finish the interval fast, but take the middle part
easy	

Drills

catch up	touch hands at the front of the stroke, <i>i.e.</i> leading arm pauses in the forward glide position until the trailing arm catches it up focus on distance per stroke
doggie paddle	head up and completely underwater stroke, cutting short the push phase (back end of the stroke) focus on the catch and pull
fists	swim with your hands held in fists (thumb inside fingers is harder) focus on high elbow under the water and using forearms to pull
FNT	finger nail trail over the surface of the water on recovery focus on a relaxed high elbow recovery
kick arms by sides	kick on your front with both your arms by your sides, and to breath rotate your whole body to one side focus on keeping the body streamlined and driving the rotation from the hips
polo	swim with your head up out of the water and fixed looking forward and aim for a short fast stroke (use a pull buoy if necessary) focus on a high stroke rate and the catch
rotation	every 3rd arm stroke pause on that side (bottom arm stretched out in front, top arm by your side) and kick 6 to 8 beats, then continue with another 3 arm strokes and repeat the pause on the other side focus on rotating right onto your side and maintaining a streamlined position
scull	arms both out front in catch position, high elbow, fingertips pointing down, back of hand pointing the direction you're going, then short quick sweeping action with the hands (all movement from the elbows down) focus on developing a feel for the water
single arm - easy	resting arm is straight out in front (can hold a small float in this arm if needed) and swim with just the other arm focus on a relaxed high elbow recovery and the full underwater stroke
single arm - hard	a harder way to do single arm, for experienced swimmers is to have the resting arm down by your side and also breath to the resting arm side focus on streamlining and the catch
straight arm	straight arm recovery
superslow	swimming as slow as you can (a lot harder than it sounds!)
UWR	underwater recovery, <i>i.e.</i> do a complete normal underwater phase to the stroke then recover by bringing your arm through under the water also (head in the water and turn an normal to breath) focus on the catch and complete underwater stroke pattern
Stealth	Normal swimming but slow and controlled trying to make no splash at all in the water