## The Ultra Journey - Intensity zones

Zone	Effort	RPE (rate of perceived exertion)	% of LTHR (lactate threshold heart rate)	% of maximum heart rate	Recovery     Easy jogging
1	Active	10-12	<84%	<72%	Recovery
	recovery	Easy			Easy jogging
					<ul> <li>Easy jogging</li> <li>Start of warm-up pace</li> <li>Easy jogging pace between intervals</li> </ul>
					Easy jogging pace between intervals
2	Aerobic	12–14	85-91%	73–79%	Aerobic training
		Steady			All-day running pace
					Concentration required to maintain effort
					Controlled calm efficiency
					Breathing more regular than at Zone 1: often 4 steps to inhale and 3 steps to exhale
					Fatigue sensation is low; however, after this zone has been held for many hours it can
					become hard due to the accumulating fatigue
					Running pace often used on the 'easy' part of a Fartlek run set
3	Tempo	14–16	92–95%	80–86%	Deeper breathing than at Zone 2
		Moderate			Slightly higher sense of leg fatigue than Zone 2
		hard			Comfortably solid
					Conversation is start-stop in nature
					Close to marathon pace (flat/road)
4	Sub-threshold	16–18	96–99%	87–92%	This hurts
		Hard	(LTHR)		Lactate threshold training
					Conversation difficult to hold (almost impossible due to depth and frequency of breathing)
					Continuous sense of leg fatigue and concentration required to maintain effort
					• The top marker of this zone is your threshold heart rate (your average heart rate for a 1-
					hour all-out effort)
					Approx. Half marathon to 10km pace (flat/road) depending on runner's pace
5a	Above	18	100–102%	93–95%	This really hurts. The effort starts hard and progresses to uncomfortable very quickly.
	threshold	Very hard			Conversation not possible
	(super				VO2 Max training
	threshold)				3km–5km pace (flat/road) depending on runner's pace
5b	Aerobic 	19	103–106%	96–98%	Conversation not possible
	capacity				VO2 Max training
5c	Anaerobic	20	107–110+%	99–100%	Very short, high-intensity effort
	capacity				Sprints

Both % of threshold heart rate and maximum heart rate have been provided, as some people have a preference for one over the other. It is my belief that threshold heart rate is a superior form of measurement, as understanding your intensity level in relation to this key marker is more beneficial to the athlete than understanding intensity relative to maximum heart rate. The reason for this is because it is your output at threshold that is a key determining factor of your success compared to what your maximum heart rate is.

\*LTHR Zones courtesy of Joe Friel, creator of Training Peaks

https://www.trainingpeaks.com/blog/joe-friel-s-quick-guide-to-setting-zones/