# SWIMMING BY THE NUMBERS 

Bob Steele<br>Impressive NUMBERS by World Class swimmers.

>7. \# of seconds World Class women start to 15 M breakout
>6. \# of seconds World Class men start to 15 M breakout
.41 \# of 100ths of a second per kick for World Class women's kickouts (fly/back)
. 40 \# of 100ths of a second per kick for World Class men's kickouts (fly/back)
7 \# of straight-arm entries by Nathan Adrian finishing the 100 M Free in London
>1 \# of seconds it takes World Class swimmers to do a turn - strokes and IM
21 \# of strokes (4-6-6-7) Kevin Cordes took in American Record 100 Breaststroke (50.70)
15-16-17-20 \# of strokes per 50 M taken by Amanda Beard in a World Record 200 Breaststroke
16-20-22-26 \# of strokes per 50 M taken by Rebecca Soni in a World Record 200 Breaststroke
43 \# of Meters Michael Phelps was underwater streamlining and kickout in World Record 200 Meter IM
17.4 \# of seconds Phelps took to glide and kickout those 43 meters

9 \# of kicks Ryan Lochte takes before Backstroke breakout
1/34 \# of breaths and strokes taken in Men's 50 M Freestyle by World Class sprinters
$54-58-53$ Sun Yang's splits for first 100, middle $13 \times 100$ and last 100 of 1500 World Record (14:31.4)
48-52-47 (rough conversion to yards for SCY swimmers)
.590 \# of meters per second faster men are underwater than on the surface in the 50 M Free
45.8 \# of seconds Ryan Lochte is underwater doing kickouts in a 1:41.3 200 Y Backstroke
18.4 \# of seconds Ryan Lochte is underwater doing kickouts in a 44.1 100 Free
18.5 \# of seconds Ryan Lochte is underwater doing kickouts in a 47.1 100 Back

24 \# of years at which a woman swimmer peaks toward a World Record. So stay in swimming through college
23 \# of years at which a man swimmer peaks toward a World Record. So stay in swimming through college
10' 3" 1/3 \# feet and inches Phelps moves on each stroke, first 50, of a World Record 200 Free (3 entries)
$8^{\prime} 9$ and $1 / 8^{\prime \prime}$ \# feet and inches Phelps moves on each stroke, last 50, of a World Record 200 Free (3 entries).
7' 2 and 7/32" \# feet Katie Hoff moves on each Freestyle stroke (3 entries)
30 \% of a long course race can be swum underwater
60 \% of a short course race can be swum underwater
11 \% decrease in aerobic capacity in training or racing by drinking alcohol (12 sec for a 1:50 swimmer)

While these swimmers are older, stronger and more experienced than Age Groupers, it gives and appreciation for what they do along with important targets for youngsters to aim at as they grow into our sport. Underwater streamlining and kickouts (fly/back) are essential to swimming fast you MUST be SAFE and practice only in sessions supervised by an ON-DECK COACH.

