## Which Combination of Suit and Cap Has the Fastest Effect between Backstroke and Breaststroke?

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The purpose of this project was to determine which combination of swimsuit and swim cap was fastest for the dropdown transition between backstroke and breaststroke. The project was inspired by being a competitive swimmer and would like to have an idea of which suit and cap is best for me to use during a race. This experiment is helpful to the swimming world because most swimmers and coaches like to know what is best for them when it comes to racing. The pool was marked off to swim a whole 25 yards for each trial. Of all the six combinations, each on was tested five times with 75 seconds rest between each one. Each trial was tested and recorded and were averaged together. The Speedo LZR Elite suit and latex cap combination had the fastest timed transition. The TYR One Solid suit and latex cap combination has the slowest times transition. The latex caps seemed to have a faster effect, but the silicon cap actually had the fastest effect throughout the experiment. The results of this experiment should give a little help to the swimming world on what to use next time for competition.