



## Dimensionless Number: Task 5



Which dimensionless quantity describes the ratio of convective to conductive heat transfer at a body's surface?

1



Nusselt number is defined as  $Nu = \frac{\alpha L}{\lambda}$  and characterizes the mechanisms of heat transfer at a body's surface that is surrounded by a fluid. It gives the ratio of convective heat transfer, which consists of advection and diffusion, to conductive transfer.