

Slow Down and Stop

At the end of a bicycle race, a rider slows down. Force is needed to slow and stop a moving object. A bicyclist pulls brake levers which move brake pads. Brake pads squeeze against a wheel's rim, slowing the bike until it stops. The force of two surfaces rubbing against each other is called **friction**. Friction slows a moving object.

Box being pushed in this direction



Friction of the floor pushes in the opposite direction.



To move a box you must overcome the force of friction that acts in the opposite direction.



Brake pads provide some of the friction needed to stop the bicycle. Without friction, a moving bike would never stop!