

Some Types of Forces			
Force	Symbol	Definition	Direction
Friction	$F_f$	The contact force that acts to oppose sliding motion between surfaces	Parallel to the surface and opposite the direction of sliding
Normal	$F_N$	The contact force exerted by a surface on an object	Perpendicular to and away from the surface
Spring	$F_{sp}$	A restoring force; that is, the push or pull a spring exerts on an object	Opposite the displacement of the object at the end of the spring
Tension	$F_T$	The pull exerted by a string, rope, or cable when attached to a body and pulled taut	Away from the object and parallel to the string, rope, or cable at the point of attachment
Thrust	$F_{thrust}$	A general term for the forces that move objects such as rockets, planes, cars, and people	In the same direction as the acceleration of the object, barring any resistive forces
Weight	$F_g$	A field force due to gravitational attraction between two objects, generally Earth and an object	Straight down toward the center of Earth