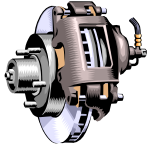


Decreasing Friction

The pictures below show you some things which will only work when the friction is very small.



- Sometimes we want to keep the frictional force small to save wear on moving parts.
- Sometimes we want to keep the frictional force small to make our work easier.
- Sometimes we want to move fast.

REMEMBER: We can make the frictional force smaller by:

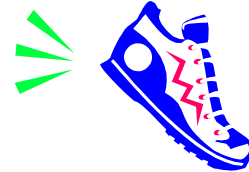
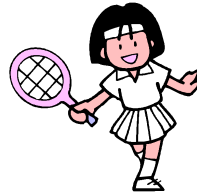
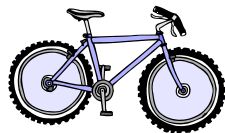
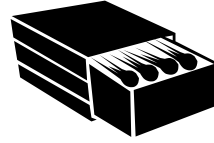
- Using rollers or ball bearings
- Making the surfaces smoother
- Using a lubricant (oil, grease etc..)

COMPLETE THE FOLLOWING TABLE:

All these things work when friction is small	How do we keep the frictional force small?	Why do we want to keep the frictional force small?
Roller coaster		
Car parts		
Sled		
Door Hinge		
Ice skating		
Slide		
Bike		
Wheel axle		
Watch		

Increasing Friction

The pictures below show you some things which will only work properly when there is a large friction force.



- Sometimes we want to keep the frictional force larger to give a better grip.
- Sometimes we want to keep the frictional force to help wear away a surface.
- Sometimes we want to use friction to give us heat.

REMEMBER: We can make the frictional force larger by:

- Making the surfaces rougher
- Using a large force to hold the surfaces together

COMPLETE THE FOLLOWING TABLE:

All these things need a large frictional force	How do we keep the frictional force large?	Why do we want to make the frictional force large?
Watch winder		
Tyre tread		
Match box		
Knot		
Lighter		
Bike pedal		
Racket grip		
Soles of running shoes		