

Homework 2: Friction

Summer Term - Week 3

Friction

Friction is the force between two surfaces. One sliding across the other.

e.g.  and  or  and 

Friction works in the opposite direction to the object that is moving across it. Friction makes things slow down. Therefore if you rolled a ball across ice, it would move further than if you rolled the ball across grass.



Friction also produces heat when two surfaces rub together. When you run in the playground, the soles of your shoes stop you slipping. Some shoes have patterned soles. This creates more friction. This is why trainers have non-slip soles. Surfaces like ice and metal have very little friction and is why ice skates have metal blades.



Friction Questions

- 1) To create friction do we need one or two surfaces?
- 2) Does friction work in the same direction or opposite direction?
- 3) Look at these two soles:
a  b 
Which shoe sole would create the most friction in the playground, a or b?
- 4) Would a toy car when pushed go further on sand paper or tin foil?
- 5) Why are ice skate blades made of metal?

- 6) Why do trainers have a pattern on them?
- 7) Why do cars tyres have a pattern on them?
- 8) Which surface has least friction, glass or grass?