



What is Friction?

A fun experiment to test out friction on different surfaces.

Friction

Friction occurs between **two surfaces** that slide **against each other**.

Friction is the force that acts against you when you try to move something heavy.

The **rougher** the surface, the **stronger** the friction.

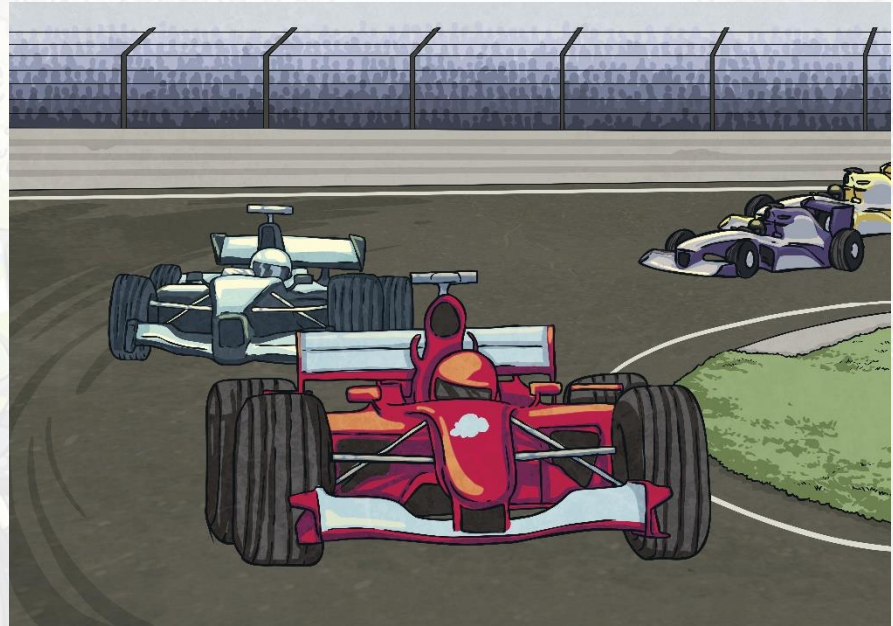


Friction produces heat, like when you rub your hands together.

Using and Reducing Friction

Friction is useful when it helps us **grip the floor** with our shoes and stop car tyres skidding.

However, for people like ice skaters, it is a good thing that ice causes very little friction.

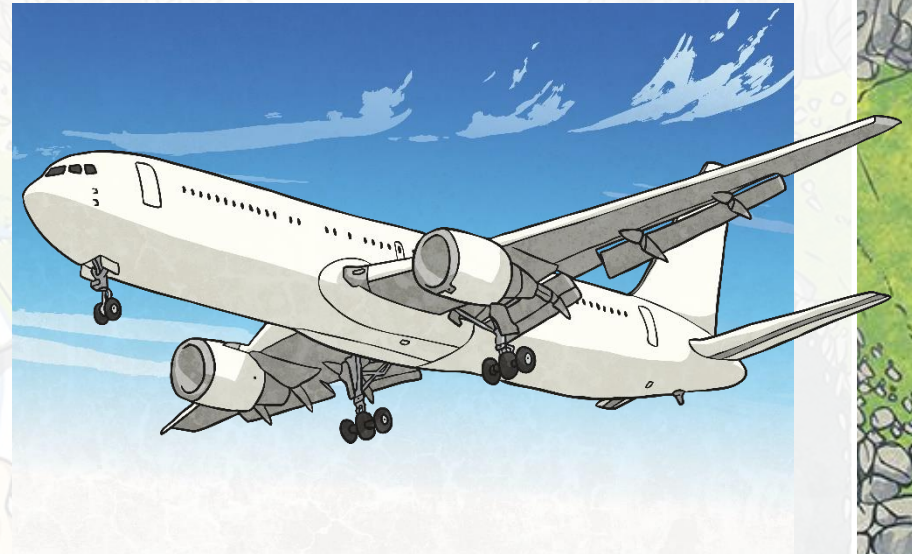


Friction can be reduced by using methods like **lubrication**. Your door hinges will probably be lubricated by oil to reduce the wear and tear caused by friction.

Air Resistance

Air resistance is a **type of friction**.

Air resistance makes it more difficult for an aeroplane to travel through the air.



The **streamlined** shape of an aeroplane helps to reduce air resistance.

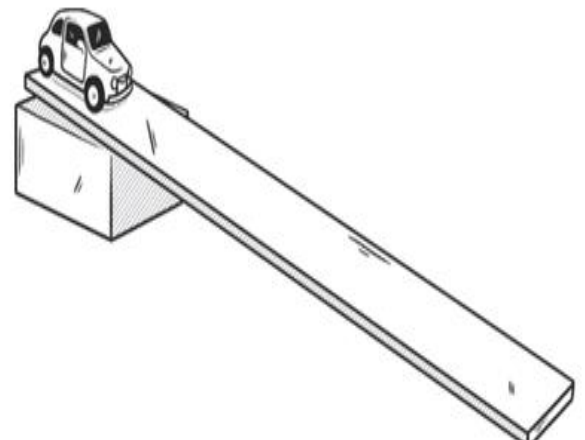
Air resistance is also what makes parachutes work.

TASK

I would like you to design an experiment were you are testing the friction of different surfaces.

All you need is a toy car, a ramp and some different materials to let the car travel across. Look at the picture here to give you some ideas.

Have fun!



Experimenting
Predict which surface will
have the least friction and
which surface will have
the most friction causing
the car to slow down
quickest.

