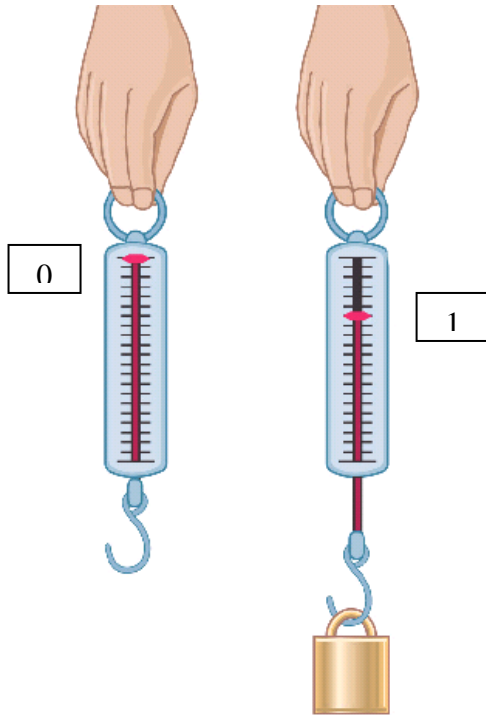


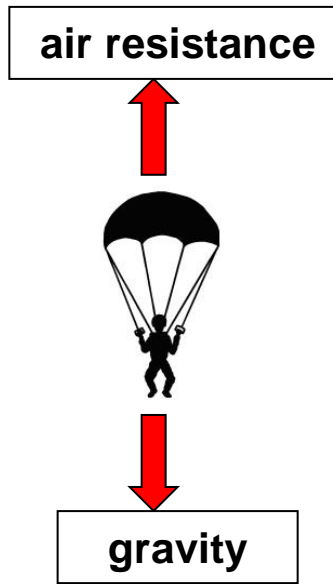
4E FRICTION

| Glossary | |
|-------------------------|--------------------------------------------------------------------|
| air resistance | – the force that air exerts on a moving object |
| force | – a push, pull, twist or turn |
| forcemeter | – a device used to measure forces (sometimes called a newtonmeter) |
| friction | – is the force between two moving surfaces |
| gravity | – the force that causes all objects to fall to the ground |
| mass | – the amount of material in an object measured in grams (g) |
| newtons | – the units used to measure forces (N) |
| speed | – how fast an object is moving |
| stationary | – not moving |
| water resistance | – the force that water exerts on a moving object |
| weight | – the force downward on an object caused by gravity |

Compare the readings on these two **forcemeters**;



A **mass** of 100 grams will exert a **force (weight)** of **1 Newton (1N)**.



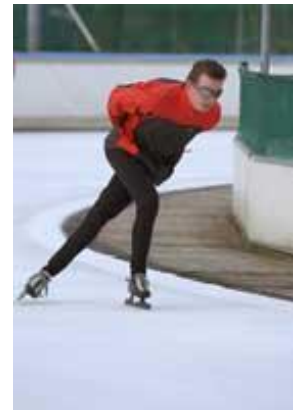
When we rub our hands together the warmth

we feel is because of **friction**. Both **air resistance** and **water resistance** are also types of **friction**.

The **force** that pushes against us when we are swimming is called **water resistance**.



Skating on ice is an example of where **low friction** is useful.



The deep tread on these tractor tires creates **high friction** when the vehicle brakes.

