

MEASURING AND COMPARING

How Heavy is Heavy?

COMPARING VEHICLES



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How Heavy is Heavy?

Comparing Vehicles



Vic Parker





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are explained in the glossary.

Measuring weight

The weight of something is how heavy or light it is. We measure small weights in grams (g), larger weights in kilograms (kg), and really big weights in tonnes (t).

Heavy things are harder to lift.

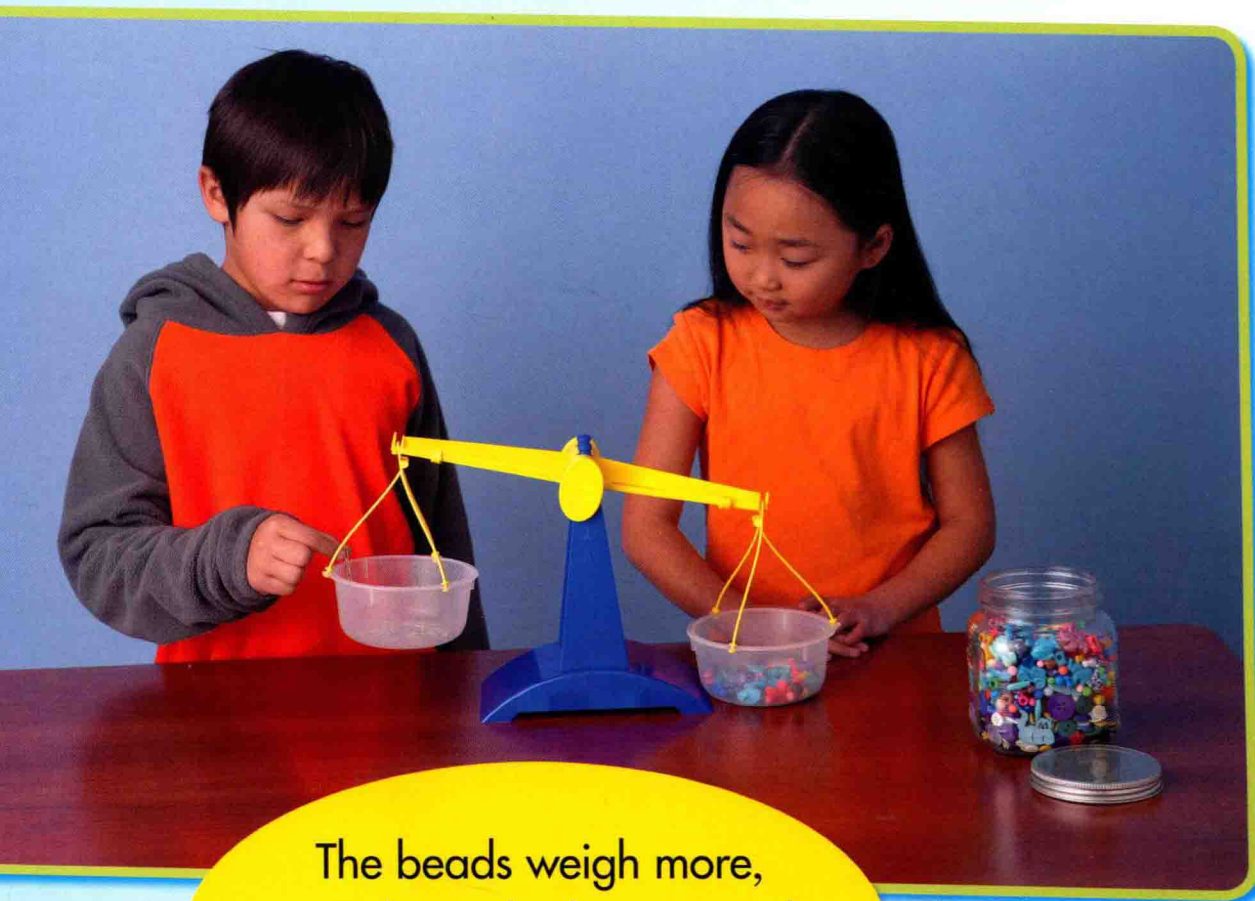


To measure something's weight we can use scales. When you put an object in a spring scale, reading the scale will tell you how much the object weighs.



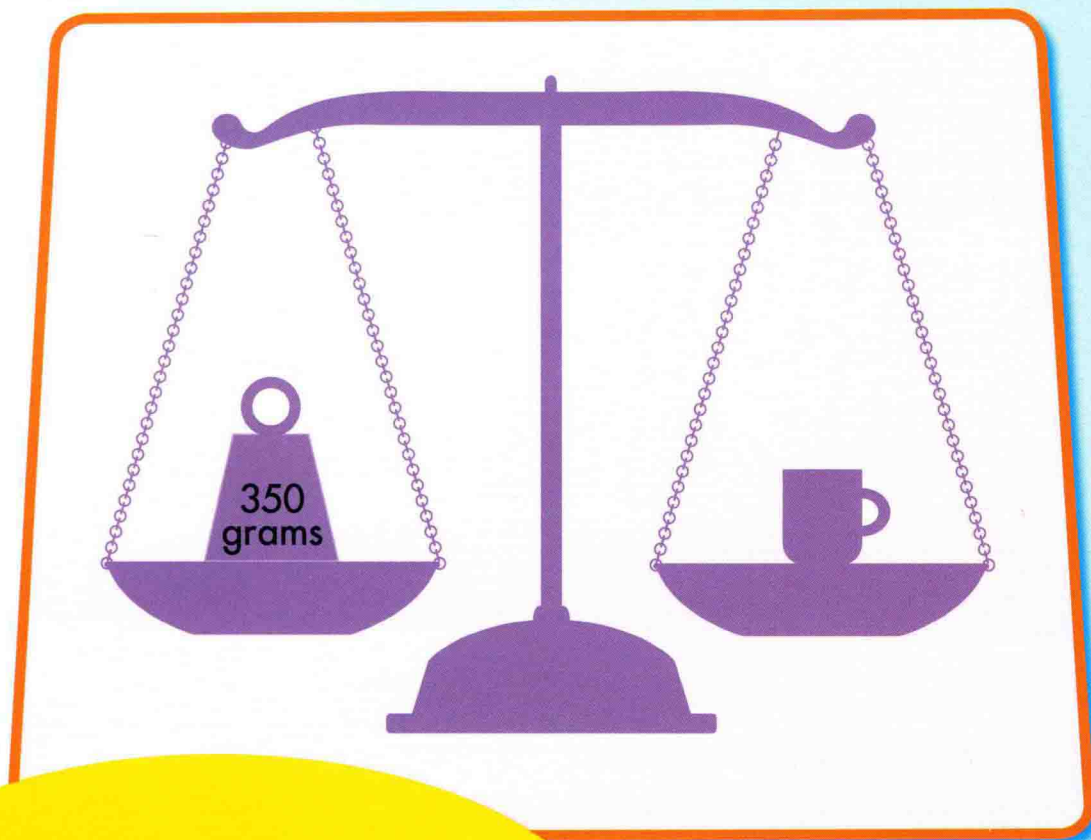
In a supermarket we often use a spring scale to weigh fruit and vegetables.

We can also weigh things by using a balance scale. A balance scale has two sides. You put the object to be weighed on one side of the scale and numbered weights on the other side.



The beads weigh more,
so the scales have tipped
to one side.

If something weighs more on one side, the scales will tip. The scales will balance when the things on both sides weigh the same.



When the two sides of the scales balance, the weights tell you how heavy the object is.

Why do people build heavy vehicles?

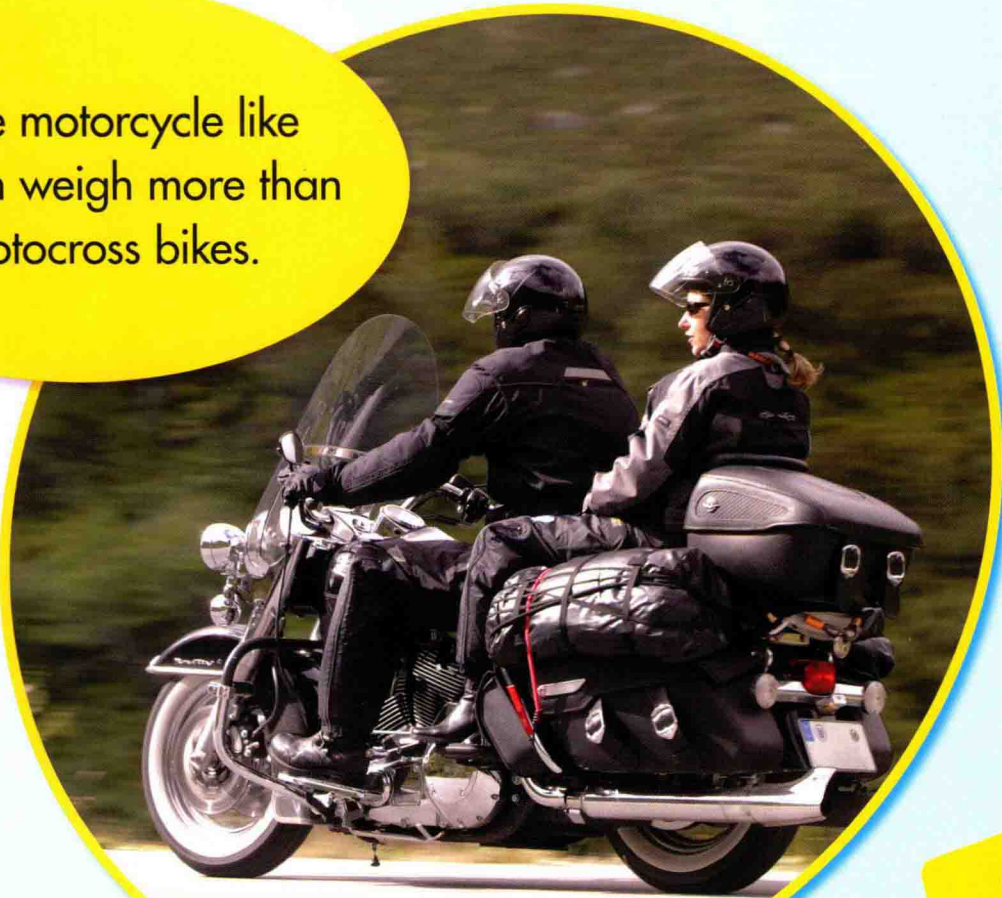
A vehicle carries people or goods from place to place. Some vehicles are built light. This often makes them fast. For instance, a motocross bike is built light, to whizz one rider along in a race.

A light motocross bike can weigh about 91 kilograms.



Other vehicles are built big and heavy, to make them comfortable or to carry heavy loads. This large motorcycle weighs much more than a motocross bike. It can carry two riders comfortably for long journeys.

A large motorcycle like this can weigh more than four motocross bikes.



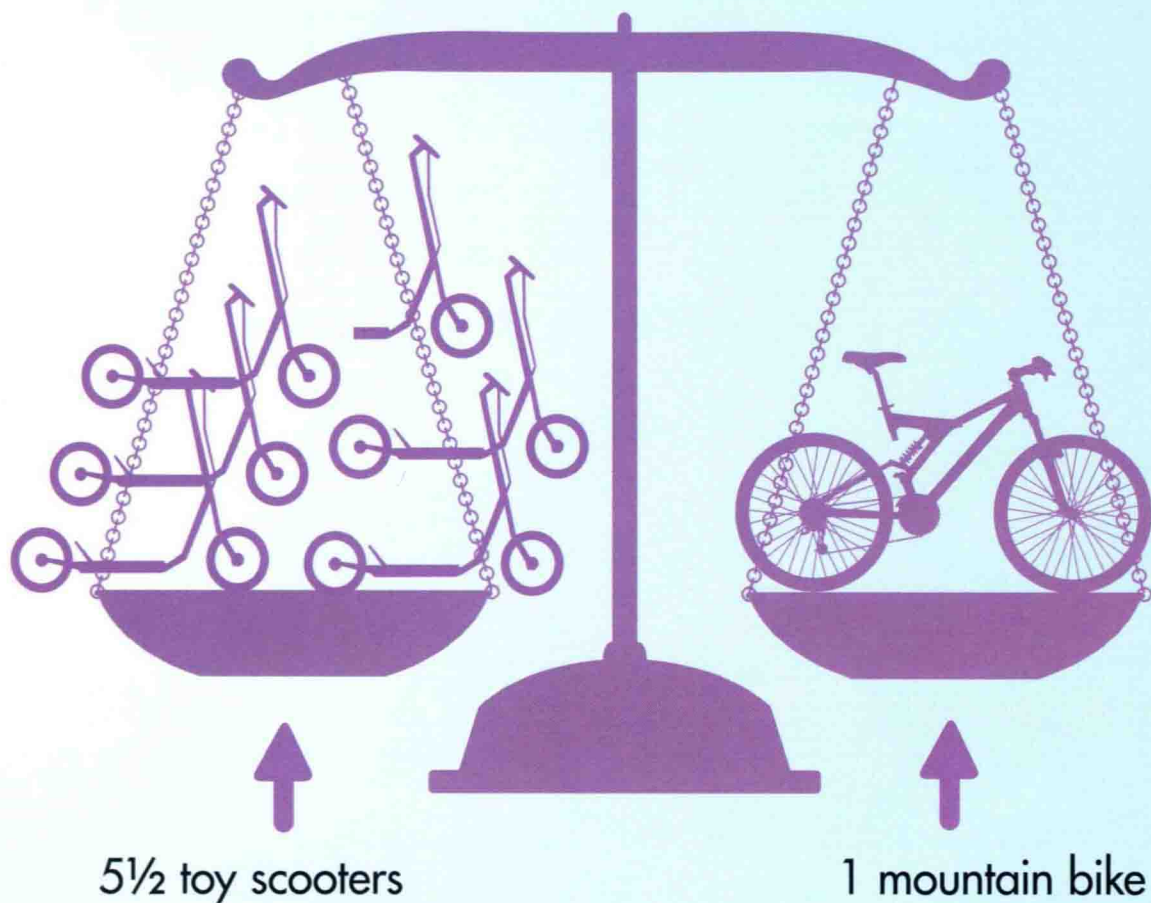
Is a toy scooter heavy?

Have you ever picked up a toy scooter?
Compared to something like a shoe, it
is heavy. But how heavy is heavy?



A toy scooter can weigh
about $2\frac{1}{2}$ kilograms.

A bicycle is heavier than a toy scooter. An adult's bicycle can weigh around $13\frac{1}{2}$ kilograms. This is about the same as five and a half toy scooters.




What is heavier than a bicycle? →

Snowmobiles

A snowmobile is heavier than a bicycle.

Snowmobiles are made for speeding anywhere snowy and icy, like mountains – they don't need roads. They are powered by petrol engines.

A person wearing a red jacket, black pants, and a white helmet with goggles is riding a black and yellow snowmobile through deep snow. The snowmobile has "ski-doo" written on its side. The background shows a snowy mountain landscape with trees.

Snowmobiles run on tracks at the back and skis at the front.

A snowmobile like the one in the picture weighs 195 kilograms. This is about the same as $14\frac{1}{2}$ adult bicycles.

