

Common properties of bodies

Mass

Determining the mass of a body by means of a beam balance

Object of the experiment

1. Determining the mass of a body by weighing with a beam balance

Setup**Evaluation**

The mass of a body can be determined by means of a beam balance.

For this the body is put on one pan and weights are put on the other pan until the balance is equilibrated.

The mass of the body corresponds to the total mass of the weights put on the pan.

Apparatus

1 Lever, 37.5 cm.....	340 831
2 Balance pans with stirrup, set of 2	342 47ET2
1 Plug-in axles, set of 2	340 811ET2
1 Set of weights, 10 mg to 200 g	315 31
1 Gauge blocks, set of 2.....	590 33
1 Round tins with cap, set of 5.....	686 53ET5
1 Measuring cylinder, 100 ml, set of 2	590 08ET2
2 Stand bases MF	301 21
2 Stand rods, 25 cm, 10 mm diam.	301 26
1 Support block.....	301 25

Carrying out the experiment

- Equilibrate the balance with the taring rider.
- Put one of the bodies on a pan of the beam balance.
- Put weights on the other pan until equilibrium is established.
- Determine the total mass of the weights put on the pan.

Measuring example

Body	Mass m in g
cylinder	237
rectangular parallelepiped	246
jar	5
measuring cylinder	35