



Material:

Item-no.	Qty.	Description
DS101-1G	1	Support base, large, L=500 mm
DS093-04	1	Sliding saddle "Sepp", H=40 mm
DS300-50	1	Support rod, squared, L=500 mm, 12x12 mm
DS400-3K	1	Bosshead cross-pattern, Demo, green
DS404-1G	1	Plate clamp on support
P1810-1D	1	Flat spring steel, 0.6mm, L=300 mm
DS400-2R	1	Clamp on saddle
DG101-00	1	Ruler, metal, L=1000 mm

Weights on hooks

Purpose

To demonstrate that deformation is an effect of forces.

Preparation

Fix the sliding saddle to the support base; afterwards insert the 50 cm rod into the sliding saddle. Fix the cross-patterned bosshead to the upper end of the support rod and insert the plate clamp on support into the bosshead.

Now fix the flat spring steel in the plate clamp on support.

Fix the clamp on saddle to the leg of the large support base and insert the metal ruler vertically into clamp.

Move the sliding saddle until the end of the flat spring steel is right in front of the scale of the metal ruler.

Experiment

Weights on hooks are hung to the end of the flat spring steel.
Weight of force or other forces cause deformations.

At the millimetre scale of the ruler it can be checked if the bending of the leaf spring is proportional to the force.