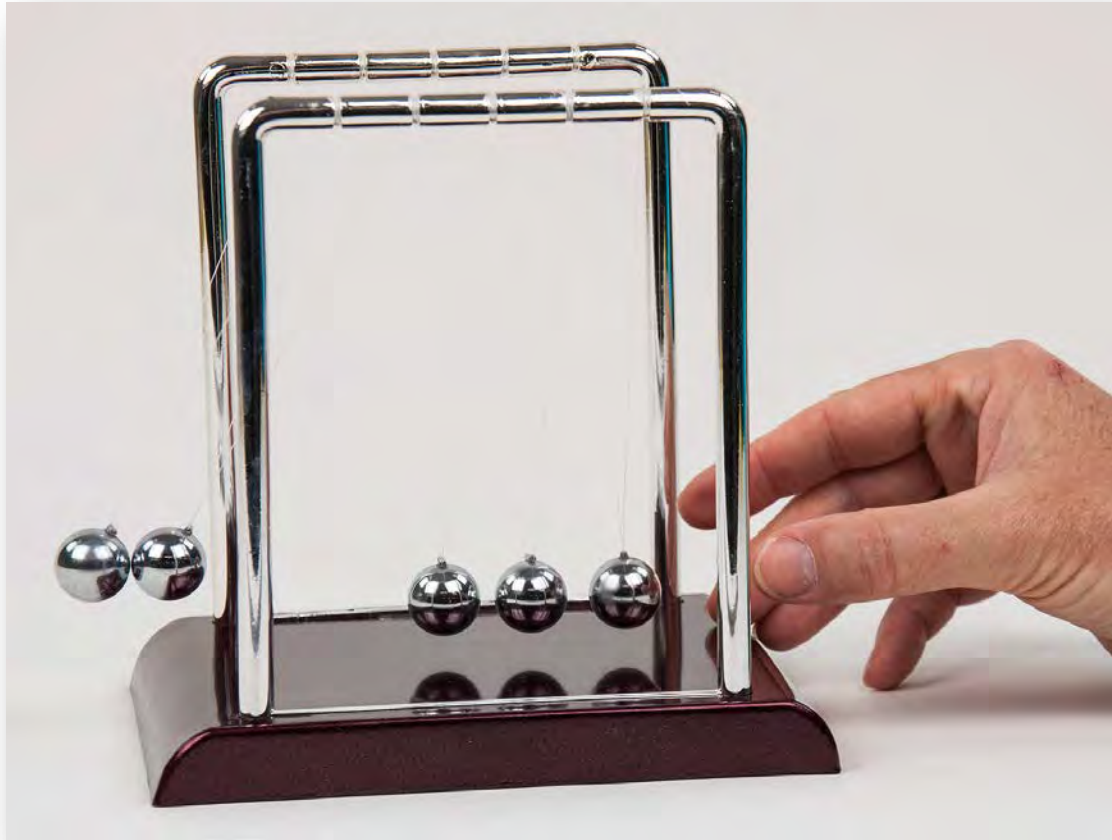


LAW OF INTERACTION – BALL COLLISION ASSEMBLY

MED 08.03a



Material

Item-no.	Qty.	Description
DM750-5S	1	Ball collision assembly

LAW OF INTERACTION – BALL COLLISION ASSEMBLY

MED 08.03a

Purpose

Demonstration of the preservation of momentum and energy in a closed system.

Preparation

Place the ball collision assembly on a stable surface; make sure that the surface is completely horizontal.

Experiment

One ball is deflected for about 3 cm and let loose. The two attached strings have to be stretched, however do not pull on them.

Afterwards repeat the experiment with two.....



... and with three balls.



Result

The number of "bumping" balls is equal to the balls that are repelled on the other side.

Preservation of momentum and energy (as long as there is no "intervention" = closed system) is clearly recognizable because the entire momentum and the entire energy are always transferred to the same number of balls.