

### The scenario

<b>Subject</b>	<b>Mechanics / Levitating magnetic disks on a scale</b>
<b>Length</b>	2:30
<b>Main goals</b>	Get familiar with the III law of dynamics
<b>Detailed goals</b>	To understand that the forces are in pairs, action and reaction.
<b>Structure and description of experiments:</b>	
<b>1. Introduction</b>	Is something levitating exerting any force on anything around?
<b>2. Main subject</b>	Levitating magnetic disks on a scale
<b>Experiments</b>	First we show three magnets and put them on one wooden rod that they repel each other in pairs. Two of them are levitating in the air. If we now the mass of the rod and the magnets the question is, what will the scale show when these magnets are levitating?
<b>3. Summary, evaluation and remarks</b>	Of course the scale will show the same total mass as if the magnets were touching each other as a result of their attraction. In each case if the magnet is levitating, there is a force from magnet beneath equalling weight of the magnet – so the upper magnet exerts the same force, i.e. its weight, on the lower magnet, which lies on the scale.  <b>Level:</b> primary school