10 forces

Can you balance six nails on one?

Hungary

Puzzle stimulates discussion on balance and centres of gravity







You will need...

seven nails
(6 inch/15 cm)
a small block of wood

Follow these steps

 Hammer one of the nails into the block of wood.
Pose the following problem: how do you balance the other six nails on top of the one in the wooden block?

So what happened?

Did any of the students figure it out? This is how it's done: 1 Lay the six nails flat on the table.

2 Arrange the nails as shown in the picture at top right. "Three heads are better than two" may be a useful way to remember the arrangement at each end.

3 Gripping the arrangement at the centre, carefully balance it on the upright nail.

PHYSICS ON STAGE 3