

# Simple machines do work: levers and pulleys

energy-forces

**What you need:** 30 cm ruler or equal card strips · pencil or dowel to use as a lever pivot · cotton reel or small pulley wheel · string or strong twine (about 1.5 m) · metre stick · two stable chairs for hanging the metre stick · small load (cloth bag with multilink cubes, or light plastic bottle less than half full)

## Words to use

Simple machine · Lever · Pulley · Trade-off

## Our question

How does a lever or a single pulley change the effort needed to raise the same load?

I predict...because...

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## What we found out

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When the lever made the push easier, what happened to the distance your hand moved?

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What did the single pulley change most clearly compared with lifting by hand?

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