Lesson 18

Pulleys and gears

Energy & Forces

Words to use

Pulley · Gear · Effort and load

Our question

> **How does using a single pulley change the effort of lifting the same load compared with lifting it straight up by hand?**

I predict…because…

What we found out

Did you keep the same load for both trials?

How did your group judge which lift felt easier to control?

What changed about the direction of the effort?

Draw your pulley. Label the load, the effort and the wheel. Add an arrow for the way you pulled and an arrow for the way the bag moved.

One thing I noticed about the bike's gears: how many times did the back wheel go round for one turn of the pedals?