

Gearbox – Teacher's Notes

This activity is designed as a tutorial rather than a challenge. Students should follow the tutorial video while working through the activities. Go to <u>www.EPro8Challenge.co.nz/Tutorial</u> and enter the Challenge Code **SJRC**.

Summary

Teams will be guided through constructing a gearbox. They will make observations of their gearbox and brainstorm how it could be useful. They will consider the maths behind a gearbox (ratios).

Principles

Mechanisms, Forces, Ratios.

Extra Equipment

2kg Weight.

Notes

Because this is a tutorial format we suggest teams DON'T try and solve it without watching the tutorial video. The video contains the explanation of some important concepts that are much easier to explain in actions than in writing.

Our Solution

