

## Connecting

## Stretching

## Transferring

Topic: **2a About Resilience**Activity: **Heath Robinson Challenge****What you are trying to achieve ...**

- Enable students to stick with a challenge and generate their own creative solution to a problem.
- Show how noticing, persevering, managing distractions and absorption can lead to surprising results.
- Link Resilient skills to other capacities; reasoning, planning, distilling, collaborating ...

**Plenary introduction**

- Show the Heath Robinson machine (see Resource) and ask two questions:
  1. What job does the machine do?
  2. What sequence of events make it work (what happens first ...)?

Allow two minutes only

- Take back observations in plenary — challenge imprecise noticing, etc. Ensure sound sequencing of events (notice: the stirrup pump, the shovel, the distance gauge, etc.)

**Set the Learning Challenge**

- Ask students to list all mechanical devices in the picture as if they were engaged in a scrapyards challenge (30 seconds).
- Ask them to consider other mechanical devices that could be useful when making a machine.
- Set the Mousetrap challenge (see instructions) — stress no electronic or electrical aids, ONLY mechanical devices.
- Establish groups of four or five with an observer. Provide marker pens and flip-chart sheets for drafting, revising and completing task.
- Provide observers with observation sheets
- Allow 20 minutes.

**Presentation of designs**

- Groups distil main points and prepare a presentation to convince others of the worth of their particular design solution.
- When groups present their designs, observers meet to compare notes about learning muscles used and identify those that they feel would have improved the outcome if they had been used more

**Debrief with observers**

- Observers feed back to their groups
- Individuals write down the learning muscles that they wish to focus upon and need to improve.

**Hints and tips**

Select observers carefully.  
Look carefully at the picture yourself beforehand.

**Things to Try ...**

Using other pictures of this kind.

Coaching Notes

Learning Challenge

Resource

Observation Sheet