

How can I design a machine to help me?

How do I engineer a solution to a problem?

WOW!

Trip to Renishaw –  
Engineering  
workshop

### Immersion: skills

Identifying a problem  
Drawing 3D models  
Modeling using recyclable materials  
Oral presentation skills  
Renishaw Engineering workshop

### Have-a-go: skills

Draw 3D models of machines of interest  
Model machine of interest using recyclable materials  
Oral of the machine

### Immersion: knowledge

Classify – what are machines and what aren't? (microwaves, washing machines, hoovers, a car, army tank)  
Machine terminology  
History – machines – first, most revolutionary  
Workshop with aeronautical engineer from Airbus – Is a plane a machine and how are they made?  
Environmental issues and sustainable energy  
How does creativity help? (STEAM)

### Have-a-go: knowledge

Describe the workings of machines using technical terminology – comparing old to new – typewriter with laptop  
Explaining environmental issues and how they could be addressed – linked to their own invention.

### The Challenge

Design a machine  
that solves a  
problem

Documenting the challenge:  
Display array on machine on website and Facebook page  
Celebrating the challenge:  
Exhibition – invite parents in