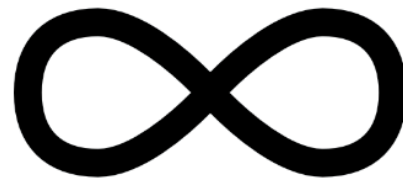
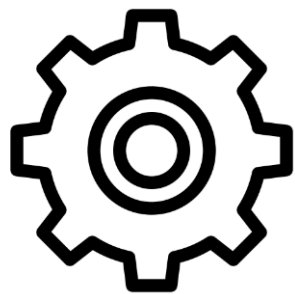
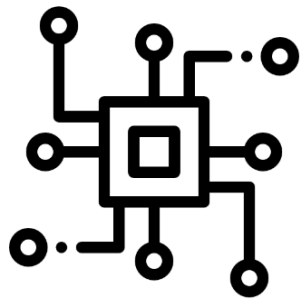
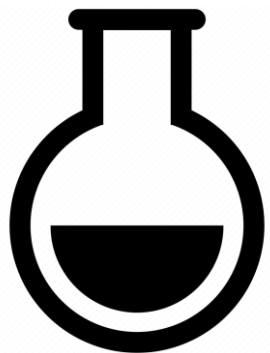
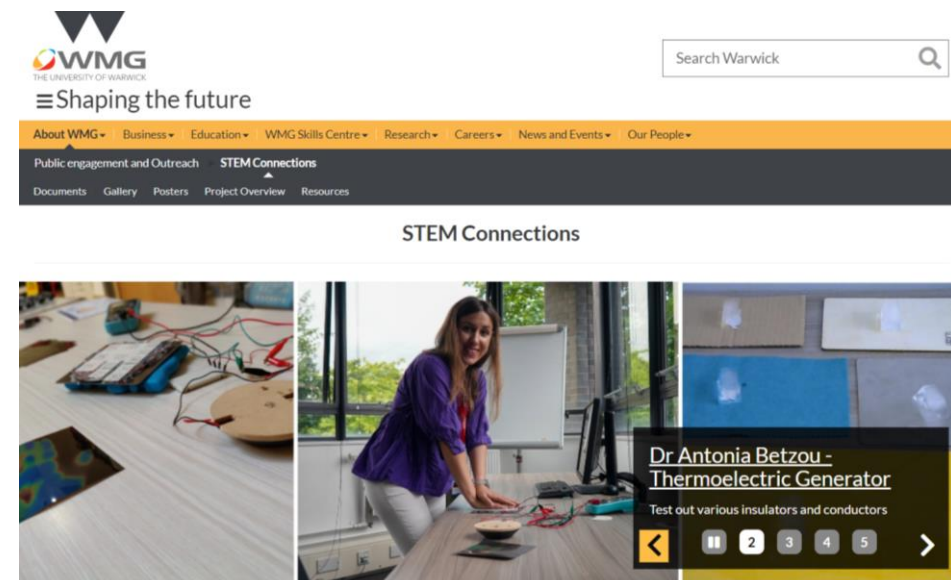


STEM Connections



STEM Connections

STEM Connections is a Research England funded project at the University of Warwick that highlights the technology that is being researched at the university, the impacts that research could have on the local population and wider society, and the personal stories of the people involved in that research.



STEM Connections

Meet the Academic

Piotr Klin

What made you want to work in STEM?

I can't tell you a story that I wanted to be a scientist in a white coat. Instead, I found interest in track cycling which has a lot of maths and engineering involved as it's a controlled environment, so I moved into Sports Engineering.

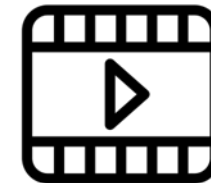
Find out more:



www.warwick.ac.uk/stemconnections

WARWICK
THE UNIVERSITY OF WARWICK

Mechanical energy to Electrical energy



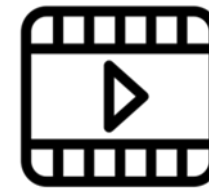
PLAY VIDEO

Meet Piotr Klin, an Assistant Professor who inspires everyone to love engineering and science through cycling. Piotr uses sports and the way our bodies move to help explain complicated physics in an engaging way that young people can relate to.

Piotr J. Klin

STEM
Connections

How can we teach the principles of electromagnetism, circuits, power, voltage, and sustainability and make it into a competition that children love? Easy, ask Piotr Klin to make a demo. His hand-powered generator put smiles on faces and knowledge into heads.



PLAY VIDEO



Building an electrical generator

Materials Required:

- A battery
- Iron nail
- Metal instrument
- Copper wire
- Silicon fingers or any other insulator

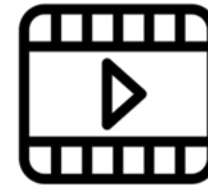
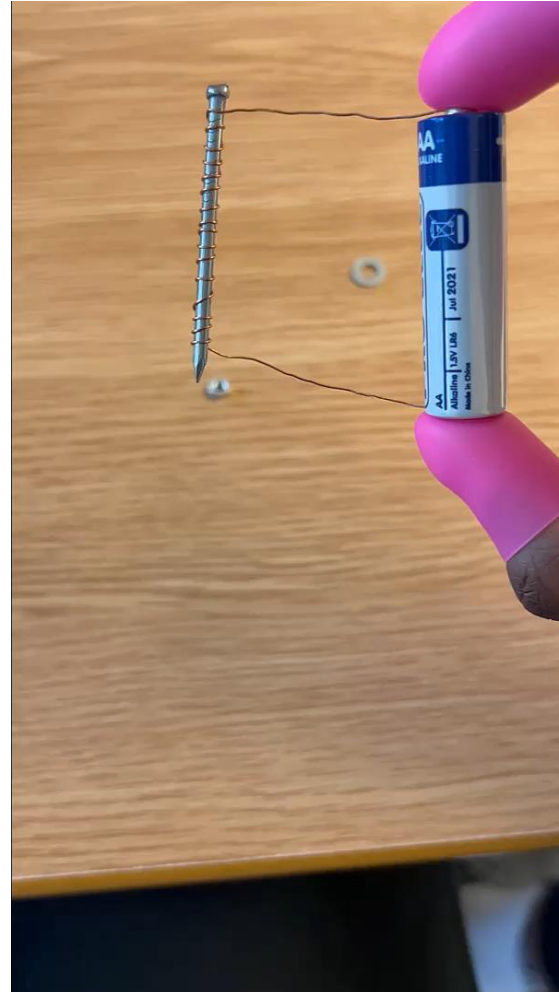
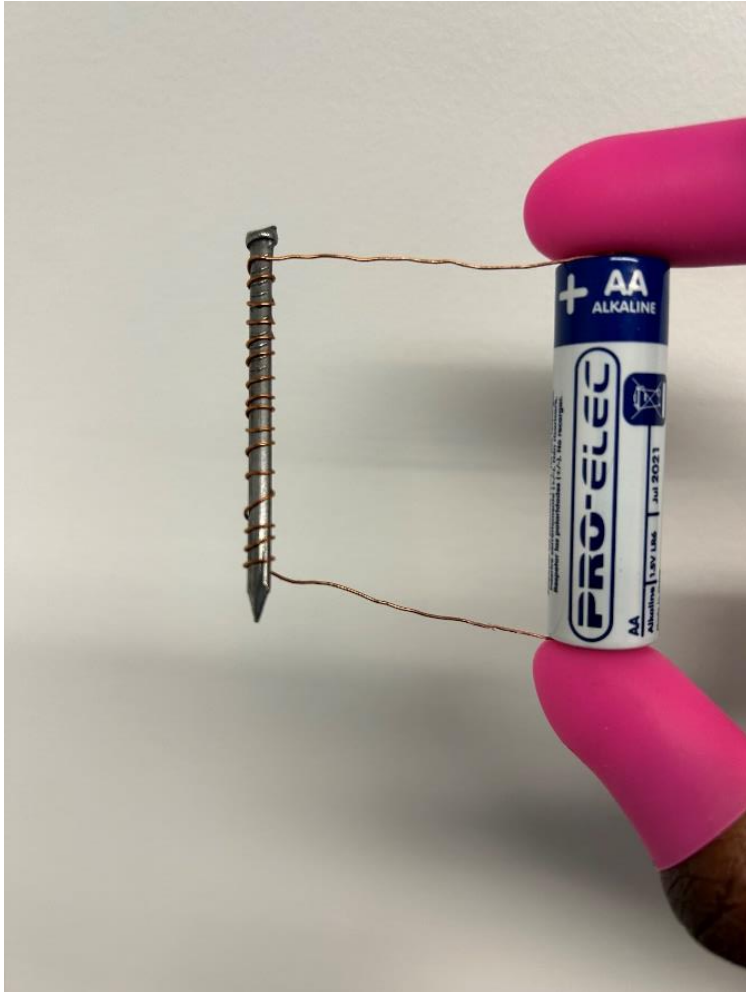


Step by Step Instructions:

1. Wrap the copper wire around the iron nail leaving two threads at each side



2. Hold the battery in between the two copper threads using silicone fingers



PLAY VIDEO

3. Test your E-magnet by bringing it near a metal object

Exploring this concept further:
Do the number of coils on the iron nail affect the strength size of the e-magnet?

SECONDARY: Linking Academics area to careers and industry
Other useful websites

PRIMARY: Linking to subjects offered in Secondary schools
Maths, Science (Biology, Chemistry, Physics), Design &
Technology (Engineering)

Thank you!

STEM Connections

