LO1 STEM in Action

"MY BEST" - STEM LESSON

We are not looking for detailed lesson plans – just great ideas, lessons that go well (with why) and unusual ideas and approaches. The idea is to inspire others.

Lesson Plans

Lesson Title	**Galvanic cell**
STEM Topic	Science – Technology – Engineering – Maths – STEM (ALL) (Circle as appropriate)
Aims of the Session (Links to curriculum and qualifications?)	Exercise on galvanic cells. How they work and what they are made of. Links to chemistry, technology.
Group and Age	14 or 16-17
Lesson Description - Key ideas and/or novel approaches	Work in pairs. 1) Put two electrodes (of different kinds of metal: Zn, Cu, C, Pb, Al, brass) into fluid (water with salt, vinegar, coke, minerals) or into fruit, potato. 2) Measure the voltage and pick the best combination of metal + electrolyte. 3) Discuss the use in practice.
What do you like about this session?	Students enjoy the freedom of choosing what materials (metals, fluid) to use. They are usually surprised by effectivity of using coke, which leads them to consider its ingredients.
How does this Lesson cater for women or students from a minority ethnic background	The task is neutral. No differences to make.
Any other comments or suggestions	Students get to remember the way galvanic cells work way better when they get to try making it themselves.