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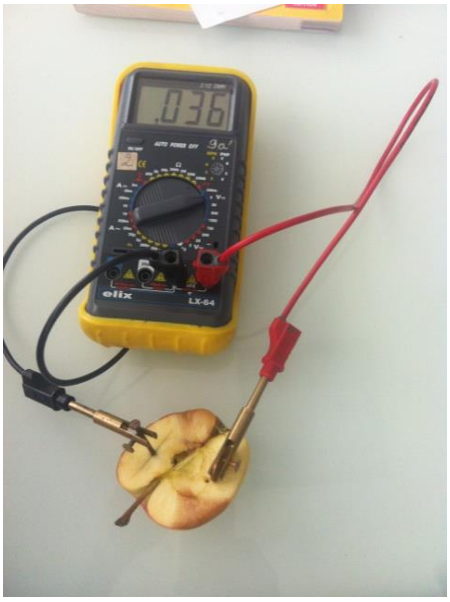
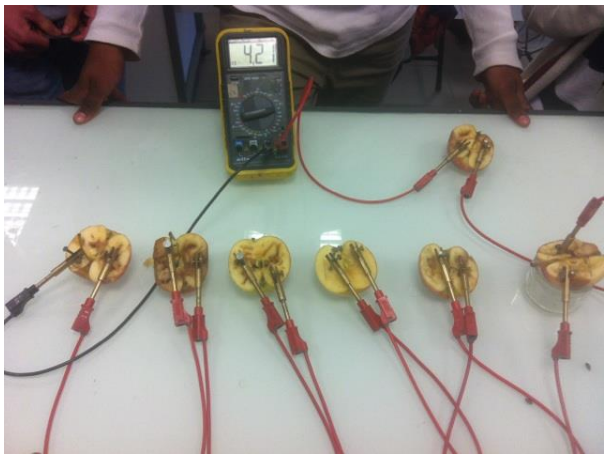
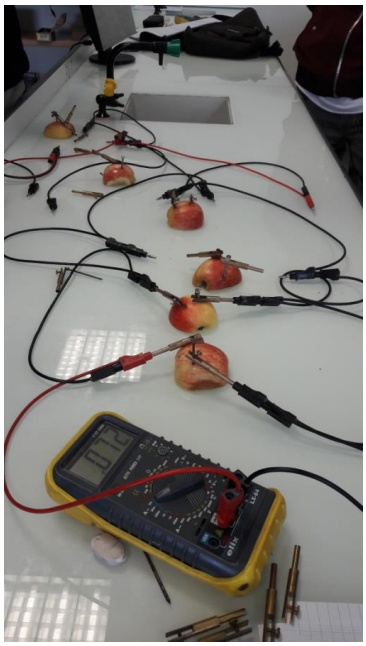
Project ICAROS **Report Code**	***FR-STEX-2016-MAY-05***
Title	*Battery building*
Start/End Date	*15-DEC2016/ 16-DEC-2016*
Coordinator name and email	*Marc Garrigou – marc.garrigou@ac-toulouse.fr*
Name of teachers	*Patrice SUIN – patrice.suin@ac-toulouse.fr*
Number and age of students	*24 students / 16-18 years old*
Description of activities	*During this session, our students in first year of MEI (industrial equipments maintenance) build a battery with their backpack content to charge the drone battery.* *The aim is to understand the functional principle of a battery using the need to charge a drone 3,7V Li Po power cell.* *They first build a single battery using Coins, nails, iron wire, apple, water, soda,…* *Then as the voltage is insufficient they have to connect several batteries in different ways to get to 3,7V.* *Soon, they are going to study the Li Po technology, reviewing by this way, the previous chemistry lesson about redox reaction.*
Learning outcomes	*During this teaching sequence the exam skills practised by the students are :* • *Appropriating* • *Analysing* • *Carrying out (Implementing)* • *Validating* • *Communicating* *<u>The different abilities associated to the degree framework are :</u>* *T4 Building a battery and measuring its voltage.* *Reminder:* *CME2* Experimentally establishing that a wire supplying several dipoles is crossing by the sum of the intensities used by each dipole. *T3 Identifying oxydizing and reducing components.* *Using the electrochemical scale.*

Photos or other relevant material







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