



Electrical safety videos

It is vital before we start that you have a good healthy respect for the electricital energy. We don't want you terrified but we do need to make you see the damage that can be caused if things go wrong or if it is not treated sensibly.

We will not have time to watch ELECTRICAL GRAFFITI but it can be viewed during a couple of lunchtimes if you bring up your dinner. We should be able to see some clips of electrical safety but there are other good ones on the web. If you don't get to see all of these in the class try viewing some at home, but DO NOT TRY ANY OF THE STUNTS AT HOME- THEY COULD KILL!

Here are a few I have selected, some are American so the plugs might look different but still the same rules apply.

- http://www.twothirtyvolts.org.uk/electrical-safety/around-your-home/
 (use this in the first instance)
- 2. http://www.esc.org.uk/
- 3. http://video.google.co.uk/videosearch?hl=en&q=electrical%20safety&cr=countryUK%7CcountryGB&um=1&ie=UTF-8&sa=N&tab=wv#
- 4. http://www.youtube.com/watch?v=l-wXyw0tvSA
- 5. http://www.veoh.com/browse/videos/category/educational and howto/watch/v18592895eRqz2Net
- 6. http://www.youtube.com/watch?v=ay Wzyec36A&feature=player embedded#
- 7. <u>http://www.youtube.com/watch?v=PvPmuReff6U</u>
- 8. http://www.youtube.com/watch?v=rTbBqGFdJF4
- 9. http://www.break.com/usercontent/2008/11/The-Electrical-Safety-Foundation-International-Launches-607009.html
- 10. http://www.5min.com/Video/Learn-About-Electrical-Safety-61996853
- 11. http://www.metacafe.com/watch/2031644/electrical_safety_foundation_international_warns_consumers_about_the
 dangers of counterfeit electrical products/
- 12. http://video.google.co.uk/videosearch?hl=en&q=electrical%20safety&cr=countryUK%7CcountryGB&um=1&ie=UTF-8&sa=N&tab=wv#
- 13. http://www.escweb.org.uk/news-and-events/latest-news/View-Our-Television-Advert-id-31.html
- 14. http://www.youtube.com/watch?v=CYhILq1naZo





Important safety points

- 1. Do not mess around with electrical energy. It can be fatal.
- 2. Main Dangers of electricity
 - a. Electric shock and burns from contact with electricity
 - b. Exposure to electrical arcing
 - c. Fire from faulty electrical equipment or installations
 - d. Explosion due to electrical equipment or static electricity igniting flammable vapours or dusts
- 3. All wiring should be inspected to make sure the wires are not frayed
- 4. Never put things into sockets, metal or otherwise, only fully compliant insulated plugs.
- 5. Never put electrical items in damp places (it is illegal to have 13A sockets in the bathroom, and other sockets should be isolated from people, eg shower switches are generally pull cords, etc.)
- 6. Don't overload sockets, this can cause a fire. The maximum load in one socket should be 3000 W. Students can check this by looking at the rating plate on their appliances. If the total in one socket is more than this value then something must be removed.
- 7. Items that produce heat use more electrical energy ever second.
- 8. Don't put items in the toaster to eject toast.
- 9. Outside stay away from sub stations, pylons and other electrical equipment. Much of it is high voltage and can kill.
- 10. Please note it is the current that kills rather than the voltage across a person. Usually a high potential difference will cause a high current but this is not always the case. For example you may get a p.d. of 1000 V across the VdG but the current is miniscule so should not cause harm.

There was a young woman who had a baby in the buggy. She came home after shopping to find her kitchen flooded from the washing machine. I ask the students what they should do. Most say switch off the electricity and I say this is above the washing machine; is this OK? What happened was the young lady walked through the water to switch the electricity off and was electrocuted. Her 18 month old called the alarm from the screams. The lady ought to have switched off the electricity at the MAIN ELECTICITY box. If this wasn't accessible they should ring the electricity company and ask for it to be disconnected as an emergency. Wearing wellies, is too risky and should not be attempted.

Contact with Live Parts can result in:

- **✗** Shock leading to cardiac arrest and death (electrocution)
- × Non-fatal shock can cause other injuries
- **x** Current through the body can cause deep burns
- x Current through the body will depend upon the voltage & resistance of the circuit, including body resistance



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See ROSPA. For details http://www.rospa.com