

## Welcome to SEI's Education Ezine no 5

Halloween is coming, time to talk about Energy Vampires and Phantom Power.



Also in the update, information on what SEI is doing for Science Week, and more

Any comments or questions? Contact me at [schools@sei.ie](mailto:schools@sei.ie)

### Sections in this Ezine:

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## Events

ENFO workshops are continuing until Nov 7th. All places are booked but you can visit the Guzzler's exhibition on Energy and Climate Change and the display of our [photo competition](#) winners there Monday to Friday 10-5pm

[Science Week](#) Nov 2008



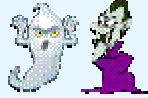
SEI is running workshops to during Science Week in Sligo, Limerick and Dublin.

- Sligo- we are running a week of workshops in [Tubbercurry Library](#), 10-14 Nov
- Limerick- [University of Limerick](#) are hosting a week of workshops 10-14 Nov
- Dublin- the [Ilac centre library](#) will hold workshops the 17-21st Nov

Most of these workshops are booked up at this stage, please contact the venues directly if you

have any enquires

## Energy Vampires and Phantom Power



Don't let them haunt your house.....

Like creatures of the night some electrical appliances such as DVD players, computers and phone chargers consume energy even when we are not using them. This can be because they are on standby we can call this use of standby power vampire power or phantom power.

The energy that they are using is usually quite small- generally 2 watts or less, but this adds up if these appliances are left wasting power all day every day, over a long period of time. Also each house or school could have a large number of appliances which are left on which are acting like vampires, slowly sapping energy.

How to become an Energy Vampire Hunter....

When it comes to energy efficiency every little helps. Taking even the smallest steps such as making sure that you don't leave electrical goods on standby will save energy and help save the amount of CO2 released into the atmosphere.

Watch out for those little red eyes staring at you out of the dark...

If your class would like to do their own energy vampire slaying here is an activity sheet attached to this email

## Become an Energy Vampire Hunter



Identify anything that is not in use but is wasting energy.  
Go from room to room and see what is on standby



Turn off standby- if you see a red light turn it off



No plug, no power.  
Unplug your phone charger or mp3 player charger  
when you are not using it



Clock radios and clocks or DVD players etc use power to work do you really need them on 24 hours a day?



Use a 'power strip' you could plug in a group of appliances into the one place making it easier to turn them all off together rather than one at a time.



Charge with your own energy Use chargers which work on solar power or by turning a handle which you use your own energy to turn

You can also reduce energy wastage in many other ways look at our [Energy saving tips for ideas](#)

## Primary Schools

### Keeping warm- Insulation



Keeping our homes and schools warm is a huge use of energy, so its important to use heating efficiently and avoid wasting heat by letting it escape through draughts etc.

The best way to demonstrate insulation and how to keep heat is through experiments and activities. There are several activities all based on insulation below take a look. Your class might even come up with some new ideas on how best to keep warm this winter.



[Guzzler investigates Insulation](#)- this SEI activity is aimed at junior infants to 2nd class can be found in [Guzzler Investigates Energy pdf](#)



[Energy file insulation investigation](#) - an SEI activity aimed at 3rd-6th class level. This is in the energy file book and can be accessed [online here](#).

### Insulate a bottle



Organise a competition for your class- Who can insulate a bottle the best?

Each student has one **plastic** bottle of frozen ice which they have to keep cool by covering it in whatever materials they like.

Then see who's bottle of ice stays cold the longest. To measure this accurately use a thermometer.

**! NB -Safety warning !-** Water expands as it freezes and turns into ice, this would mean that a glass bottle would break and could be very dangerous. Only use plastic bottles and make sure you don't fill them completely, leave a gap so that when the ice is formed and it expands there is room for this and it won't break the bottle.

Idea from [Hans Persson](#)

## Recommended website

Try this BBC website's interactive version of an insulation experiment. It would work really well if you have a white board. [Keeping warm activity](#)

## Secondary Schools

### Recycling



Lets recycle to save energy.

<http://www.recyclemore.ie/>

Recycling helps save energy. For example if you recycle a drinks can less energy is needed to manufacture a new can.

Of course it would save even more energy and waste if we reduced our waste by re-using items or not buying disposable items

For example buying items with less packaging saves lot of energy and waste.

## Recycling activity



**Piles of Plastic** - Have a go at SEI's activity from our **Exploring Energy book**. It shows how long it takes for plastics to break down and highlights how important it is to recycle them.

### Recommended site

Gotham gazette garbage game, allows you to decide what you would do if you were in charge of rubbish for New York city <http://www.gothamgazette.com/games/garbage.php>



We hope to have another newsletter soon in the meantime check our new 'news and events' part of the schools website for any updates [www.sei.ie/schools](http://www.sei.ie/schools)