

# Christmas Lesson Plan

## Christmas Lights

### Year 2

- This pack contains 2, ready to use 1 hr lesson plans.

**Key Inquiry Question:** How can I reduce the amount of electricity used in my house over Christmas?

**Sub Inquiry Questions:**

- What is the difference between mains and battery electricity?
- Where does mains electricity come from?
- How can I keep safe around mains electricity?

**Culminating Activity**

Run a 'switch-it-off-athon': Y2 children could run this or could promote this for the rest of the school to be involved in as well. Ask parents, friends, etc to sponsor children each time they turn off a light or unnecessary electrical item. This could be stand-by lights, electronic equipment including x-boxes etc, anything that reduces the amount of electricity being used in the house.

National Curriculum Objectives addressed in this unit:

## Science

### Knowledge, skills and understanding

#### Electricity

1. Pupils should be taught:
  - a. about everyday appliances that use electricity

#### Knowledge and understanding of environmental change and sustainable development

5. Pupils should be taught to:
  - b. recognise how the environment may be improved and sustained [for example, by restricting the number of cars].

## English

### Knowledge, skills and understanding

#### Speaking

1. To speak clearly, fluently and confidently to different people, pupils should be taught to:
  - a. speak with clear diction and appropriate intonation
  - b. choose words with precision
  - c. organise what they say
  - d. focus on the main point(s)
  - e. include relevant detail
  - f. take into account the needs of their listeners.

#### Composition

1. Pupils should be taught to:
  - a. use adventurous and wide-ranging vocabulary
  - c. put their ideas into sentences
  - d. vary their writing to suit the purpose and reader

#### Handwriting and presentation Presentation

- h. the importance of clear and neat presentation in order to communicate their meaning effectively.

#### Breadth of study

8. During the key stage, pupils should be taught the Knowledge, skills and understanding through addressing the following ranges of purposes, readers and forms of writing.
9. The range of purposes for writing should include:
  - a. to communicate to others

## Maths

### Knowledge, skills and understanding

#### Numbers and the number system

2. Pupils should be taught to:

##### Counting

count reliably up to 20 objects at first and recognise that if the objects are rearranged the number stays the same; be familiar with the numbers 11 to 20; gradually extend counting to 100 and beyond

##### Calculations

3. Pupils should be taught to:  
Number operations and the relationships between them  
understand addition and use related vocabulary; recognise that addition can be done in any order;

##### Processing, representing and interpreting data

5. Pupils should be taught to:
  - a. solve a relevant problem by using simple lists, tables and charts to sort, classify and organise information

## Lesson

1hr

## Objectives

- To know the difference between mains and battery electricity.
- To know which things use electricity.
- To know how to use electricity safely.

## Activities

Show

If you have some Christmas lights you could have these turned on, if not you could a picture of a Christmas tree from the net on your whiteboard.

Ask

how do Christmas lights work? They use electricity – where does this come from? Create a brainstorm either in small groups or as a class about where electricity comes from.

Explore 'What is Electricity' section: <http://www.switchedonkids.org.uk/>

## Mini-Activity

Ask

children to add to their brainstorms using a different coloured pen/pencil and then

Ask

what they found out from the clip.

Discuss

with children the difference between mains and battery electricity identifying that mains electricity uses a lot more energy and is dangerous.

Say

that energy is measured in volts.

Have the children examine AA batteries and find out how many volts they have.

Tell children that mains sockets have 230V – this is very dangerous! It is very important to never stick anything into a socket apart from a plug.

Explore: <http://www.switchedonkids.org.uk/> and go through the electrical safety tips.

## Mini-Activity

Have children find as many things as they can in the classroom that use electricity in a certain area, it might be your classroom or, if you can, the school. This could be an 'Electrical Treasure Hunt'! Have them do this in a table that identifies whether they use mains or battery electricity. You could have the children also look out for any electrical dangers and make a note of these to report to their class.

## Plenary

Share where children found mains and battery electricity and if they found any electrical dangers.

## Resources

## Internet

AA batteries – enough for 1 between 2 or 3.

Sugar paper and felt tip pens – for groups of 3.

I can identify things that use electricity.

## Assessment

I can tell the difference between mains and battery electricity.

I can suggest how to use electricity safely.

Lesson	1hr
Objectives	To know when electricity is being used and how to reduce this.
Activities	<p><b>Introduction</b></p> <p>Show the Christmas lights again. Say: I love Christmas lights, I'm going to leave mine on all the time until Christmas. Who thinks I should leave them on all the time until Christmas?</p> <p>Ask why/why not?</p> <p>Show <a href="http://www.youtube.com/watch?v=xIL5zT4_Ppo&amp;feature=related">http://www.youtube.com/watch?v=xIL5zT4_Ppo&amp;feature=related</a></p> <p>Ask children to put their hands up if they turn lights off when they leave the room.</p> <p>Ask children if they are really careful to turn off electrical things when they're finished using them.</p> <p>children if they know what a standby light is. Show children what a standby light is either using something in your classroom or a picture from the internet. Ask them if they can list things in their household that have standby lights.</p> <p>Ask what do you think the standby light means?</p> <p>Ask does the standby light mean there is electricity being used?</p> <p>Say when an electrical object has the standby light on it still uses electricity.</p> <p><b>Activity</b></p> <p>Tell children that a lot of electricity is wasted because people do not turn off lights, sockets and standby lights and we are going to help our school and our families to turn off electricity by running a 'switch-off-athon'. Over the Christmas holiday you need to keep a record of every time you turn off unnecessary electricity. For every one you turn off you can earn some money for Healthy Planet. For example your Dad might give you 10p every time you turn something electrical off. If you turn off 10 things that's £1! Imagine if everyone in the school turned off 10 things each day, that would be loads of money and we're helping the planet! Tell children that they are going to draw up posters and go to each class in the school to get the other classes to raise money as well by switching off unnecessary electricity. Discuss with children what the poster should have:</p> <ul style="list-style-type: none"> <li>- Clear title</li> <li>- The information about the Switch-athon</li> <li>- When it is taking place</li> </ul> <p>Children can also design reminders to go in their houses. Where would be the best places to put them? What are some catchy phrases and image to put on them? <a href="http://www.cdbaby.com/cd/nooshi3">http://www.cdbaby.com/cd/nooshi3</a> this website has some eco songs that could be used. Save electricity is quite catchy !</p> <p><b>Plenary</b></p> <p>Have children visit different classes and give out the sponsorship forms and put up the posters. Have small groups prepare something to say to each class and explain how the 'switch-off-athon' will work.</p>
Assessment	<p>I can identify when electricity is being used including standby lights.</p> <p>I can promote and participate in a fundraising event.</p>

[illegible]

# What can your school do for Healthy Planet?

## Adopt land and earn a grant

As well as making small changes to contribute to a healthier planet, your children might want to do more. By adopting a hectare of endangered land, your class will be protecting it for generations to come.

Choose, adopt, dedicate and view your plot online and earn your school a grant.

At Healthy Planet we think you should choose where your donation goes. It doesn't have to be parents putting their hands into their pockets. It's about children making a difference to their lives and the world around them.

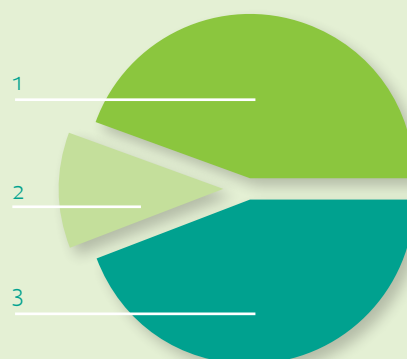
## Green fundraising to adopt land

- Cash for cans** children can collect aluminium cans that can be returned for cash.
- A car boot sale** children will learn the benefits of reusing books, clothes and toys whilst raising money towards their hectare of land. Contact [property@healthyplanet.org](mailto:property@healthyplanet.org) for help with finding a free venue.
- Old mobile phones** we will help your school make money from old phones through companies willing to swap cash for older models. [www.healthyplanet.valuerecycling.com](http://www.healthyplanet.valuerecycling.com)
- At work recycling** children can ask their parents to bring home empty ink cartridges from work that can be exchanged for up to £3 each.
- A spring clean** children can bring in old clothes and shoes to be donated to children and families in developing countries and in return for cash.

By participating in any of the activities listed, your children will begin to live the process of reducing, reusing and recycling.

Raise £180 and see how your cake gets cut

- 1 £79.78 goes to the park where your school adopted a plot
- 2 £20.44 goes to Healthy Planet's brilliant ideas factory
- 3 £79.78 goes to your children's choice: back to your school, or back to 1 and 2



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Published by Healthy Planet

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[www.healthyplanet.org/Xmaslearning](http://www.healthyplanet.org/Xmaslearning)