

How Is Energy Used In Your School? TEACHER'S NOTES

National Curriculum

English – Speaking and listening

Maths – Handling data, extracting information

Citizenship – Participation and responsible action

Geography – Knowledge and understanding of places, environmental change and sustainable development.

This is a quick 30 min session thinking about energy use and wastage in your school.

This activity could be used as an introduction to the full energy audit if there is time.

You will need to do a little research within the school to find out:-

1. Where is the electricity meter?
 - a) Check the meter just before the weekend and first thing on Monday morning. Are there any differences?
2. How is the hot water generated in the school?
 - a) Is there a single water tank for the school?
 - b) Is hot water generated individually close to the point of use?
3. Are the hot water pipes lagged?
4. Are the cold water pipes lagged?

What can the students do to improve their energy rating? They could design stickers, or posters, and suggest installing intelligent sensors or appointing energy champions.

Aim

- To get the students thinking about their environment and the heat and power that is needed.
- To encourage the students to think about waste heat and power.
- To encourage active citizenship to reduce waste heat and power.

Resources

White board, pens, pencils, map of the premises, statements for the different heating and power providers in school. If it is a particularly large secondary school you may decide to divide your class into teams so each team considers a different area.

Timing

30 mins

Task

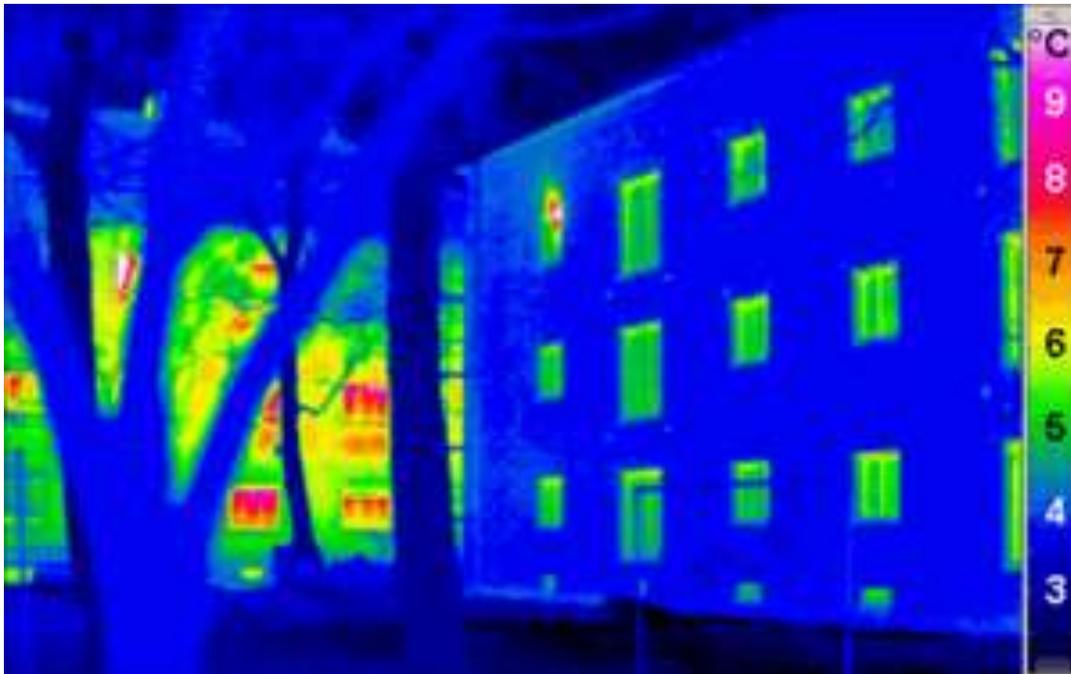
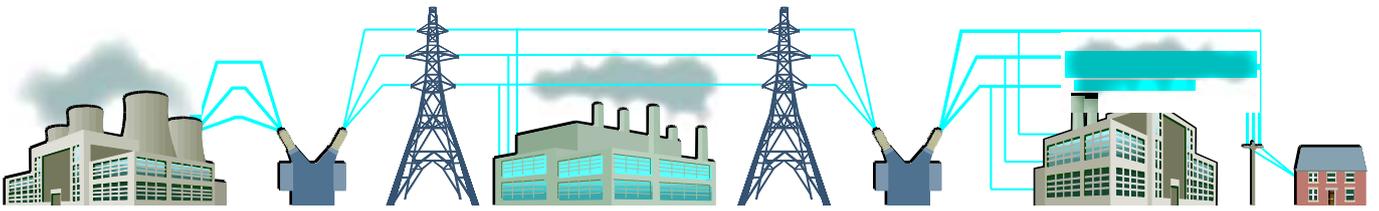
You could either:

- Use the work sheet individually.
- Brainstorm the topic as a class and record their thoughts on a large piece of paper.
- Put up 4 big pieces of paper around the classroom and ask each child to write down their thoughts on the various questions on post-it notes and get them to stick their ideas onto separate large pieces of paper.

(Think about doors and windows – do they fit properly, are they broken? Is the roof lagged? Are the lights left on in empty classrooms? Are computers and laptops left on standby? What about the admin office, fax machines and printers?)

Students could use their ideas to create a poster, presentation or assembly to change behaviour.

Power lines



Thermal Image of heat loss from buildings.

How is energy used in your school? **WORKSHEET**

1. What is your school's energy rating?
2. What do you think this rating means?
3. How is energy used in your school? List things that use energy:
4. How do you think energy is wasted at your school?
5. What do you think are the sources of energy to your school?
6. How could you reduce the amount of energy wasted?