

Topic: Sustainability

Lesson 1: Sustainable schools	KS or Year Group: KS3
<p>Resources:</p> <ol style="list-style-type: none">1. Resource 1 - Basic facts2. Resource 2 - Booklet3. Resource 3 - Letter to headteacher and governors4. Plain A4 paper and guidelines	<p>Outcomes:</p> <ul style="list-style-type: none">• Students will understand what a sustainable school is and appreciate their benefits.• Students will be able to put forward a persuasive argument about why their school should 'go green'.• Students will be able to consider what they personally can do to contribute towards making their school more ecologically sound.

National Curriculum

Key Concepts: 1. 2a.

Key Processes: 2.1a, 2.1b, 2.2a, 2.2b, 2.2c, 2.2d, 2.3a, 2.3b & 2.3c

Range and content: 3a & 3e

Curriculum opportunities: 4a, 4b, 4c, 4d, 4e & 4h

Lesson 1

In this lesson, students are introduced to the concept of 'eco-schools'. They are then given a booklet which explains in detail what schools can do in order to become more sustainable. Students then write a letter to the headteacher and the governors which asks them to consider putting their school forward for eco-school status.

Starter

- Lesson objectives and outcomes are shared with students.
- Students are each given a copy of **Resource 1 – Basic facts** and asked to spend a few minutes digesting and discussing the information.

Sustainable schools

- Students are given a few minutes to comment about what they have read. Particular attention should be drawn to the eco-schools website. Students should be asked to reflect upon how sustainable an environment they consider their school to be.

Main activity

Activity 1

- Students are put into small groups (which should take literacy levels into account) and given copies of **Resource 2 - Booklet**. It is pointed out to students that they are sharing booklets in order to save paper.
- Students are asked to read the information in the booklets and to discuss the following:
 - Which issues do they find particularly relevant to their lifestyle?
 - How many of the issues need tacking at their school and how can this be done?
 - How green is their school at the moment?
 - Are any particular departments or individuals at school which set a good example as far as sustainability is concerned?
- Students should be given a few minutes to feed back to the class about their thoughts on the booklet and their responses to the questions.

Plenary

- It is explained that every student is going to write a letter to the headteacher and the governors explaining why it is important for their school to become an eco-school. As such, each student is given a copy of **Resource 3 - Letter to headteacher and governors**. Plain A4 paper and guidelines are also distributed at this point.
- The instructions on this resource should be self-explanatory. To summarise, students are asked to write a formal letter which mentions the eco-schools website and suggests ways in which the school could improve as many as three of the nine issues from the booklet. Suggestions should also be offered by each student as to what they personally can do to make their school a greener place!
- During the last few minutes of the lesson, a few students are chosen to read out their letters to the rest of the class.

Aim high

- During the starter, high-achieving students should be able to suggest ways in which their school can help the planet to become more sustainable.
- During the main, high-achieving students should be asked to contribute to the discussion once they have read through the booklet.

Sustainable schools

- During the plenary, high-achieving students should produce a letter which makes use of persuasive language and which suggests ideas that are not mentioned in the booklet.

Assessment

In order for students to achieve certain levels within the lesson, the following should be considered:

LEVEL FIVE:

Students can understand why it is important for young people to get motivated about being part of an eco-school.

Students can draw conclusions about which of the nine issues mentioned in the booklet are the most relevant to their school.

LEVEL SIX:

Students can ask relevant questions about their school's carbon footprint.

Students can, through discussion with peers, plan a persuasive letter to the Headteacher and governors.

LEVEL SEVEN:

Students can question their own assumptions about views which they had previously held about children's/schools' contributions to sustainability.

Students can, due to the quality of their letter, initiate a response from the Headteachers and governors.

LEVEL EIGHT:

Students can analyse how people living near to the school (as well as students and staff) might be affected by their school becoming a greener place.

Students can understand the impact that eco-schools might have upon the mentality of its students when those students become adults (mentioning factors such as employment, transport, accommodation and consumerism).

Check the web

<http://www.eco-schools.org.uk/>

Summary of key learning

- Students can commit to changing one thing about their lifestyle in order to contribute towards a school ethos which is more sustainable.
- Students can appreciate that eco-schools might have a positive effect on the way in which students view both themselves and their environment.

Resource 1 – Basic facts

Vocabulary check:

sustainable means capable of being maintained at a certain rate or level



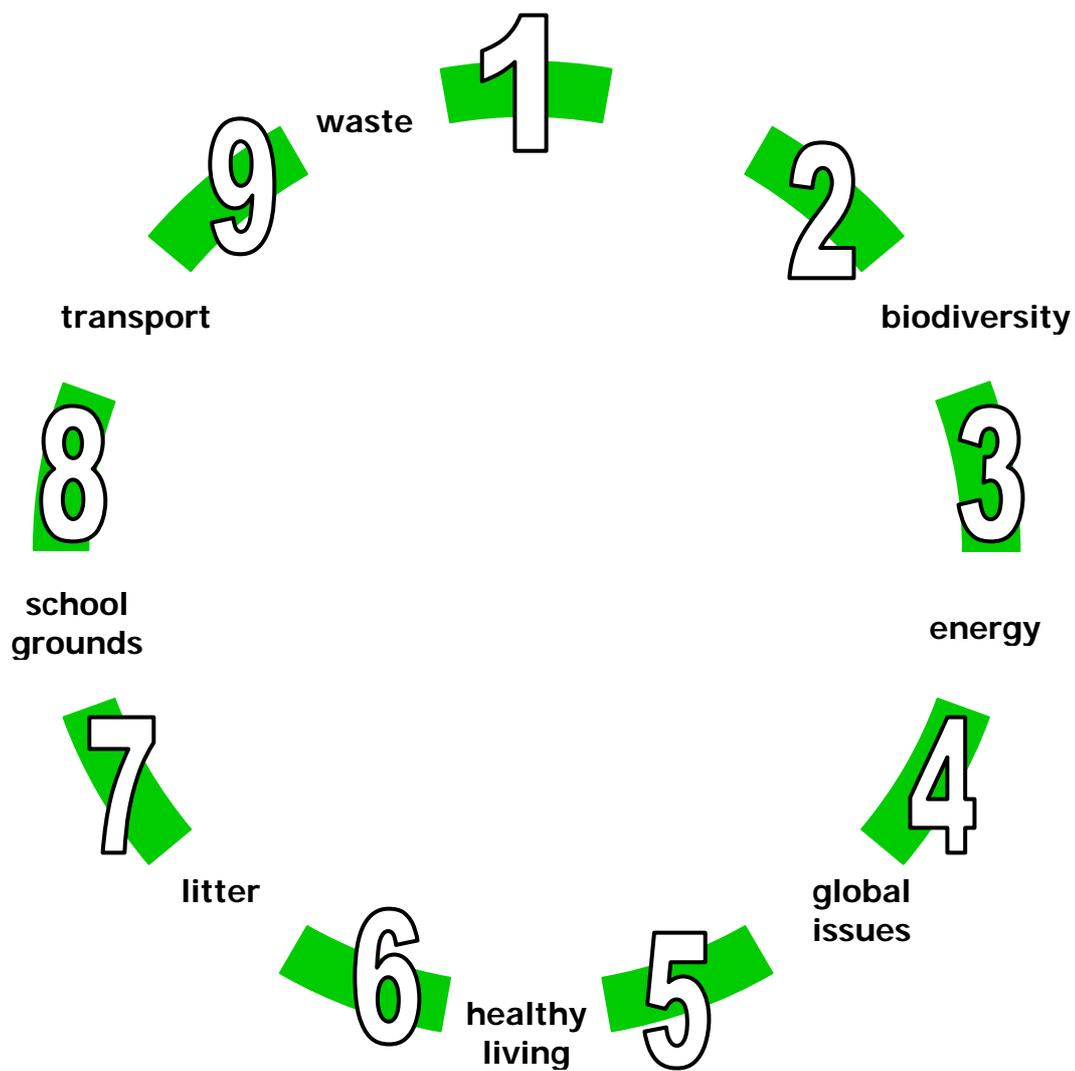
Can our school contribute to a more sustainable planet?

Bet you didn't know that...

- there are over 9,000 eco-schools registered in the UK
- about 400 new schools go eco-friendly every month
- in some areas, over 90% of schools are eco-schools
- there is a website called www.ecoschools.org.uk that is dedicated to helping schools to become more environmentally friendly
- the website recommends nine ways in which schools can make the planet a greener place.

Resource 2 – Booklet

If we want to become a sustainable school, which issues are crucial?



Issue 1: WATER

Water is a lot more than just something we drink. It is also used in many household tasks and in farming and various other industries. Thousands of products are made from water, including beefburgers, magazines and vans!

The natural water cycle doesn't really keep up with human demand currently. Pollution is also a huge problem as far as the water cycle is concerned. This can be caused by a range of factors (e.g. sewage or chemical leaks).

Although it's easy to save water, not many families do. How many people where you live take baths rather than showers? Does the garden sprinkler get turned on where you live? Are taps left running whilst people clean their teeth? The list of is endless.

Schools spend over £100 million annually on water. A large secondary school can spend as much as £20,000! However, lots of schools could save around £5,000 a year if they simply changed the way that water was viewed and used by everyone. For example, they could fix leaks and drips, change the speed of water flow in taps and reduce the amount of water used when toilets were flushed.

Issue 2: BIODIVERSITY

'Biodiversity' means different types of wildlife (e.g. insects and birds). It also means different areas where creatures live (e.g. woods, canals and fields).

The variety of life on our planet is fascinating. It is also very important because animals and plants provide humans with medicine and food. In addition, a lot of people simply enjoy being outdoors and take an interest in animals. Most humans feel sad about the thought that a certain species of animal or plant might become extinct.

In the UK, lots of changes in modern life have brought about huge losses of habitat to certain animals. Local people need to be encouraged to take an interest in biodiversity. They should make sure that the natural life cycle of all creatures and plants is protected.

Schools can encourage biodiversity through arranging for students to visit areas of natural beauty, or indeed by introducing areas of pond and plant life.

Issue 3: ENERGY

Over the last century, the amount of energy used in the world has trebled! This is because the average home now uses up lots of electricity, heat and light. Obviously, certain businesses also use up a huge amount of energy.

Power stations are using up a great deal of fuel to keep up with this demand for energy. This not only wastes finite resources but releases lots of carbon dioxide into the air.

Some scientists argue that global warming is now occurring as a result of energy use. They point to facts such as the lower amount of snow in certain continents.

Schools can lower the amount of energy they use by ensuring that all lights and electrical machinery are only used when strictly necessary. Insulation, light bulb type and carbon footprints are also factors which might be taken into consideration.

Issue 4: GLOBAL ISSUES

Students need to think of themselves as members of a global community as well as of a local community. They need to think carefully about what their rights and responsibilities are in relation to other citizens on the planet.

It is a good idea for young people to find out about issues such as migration, the arms trade, fair-trade and sourcing of food so that they can make informed decisions about their lifestyle.

Schools can encourage students to see themselves as global citizens through good Citizenship education. Experts can also be invited into school assemblies to talk about important current affairs issues.

Issue 5: HEALTHY LIVING

Since Jamie Oliver's TV campaign, most schools have become healthier places. This is definitely a good thing because research indicates that healthier children not only work better and learn better, but are more self-confident and more relaxed.

Lots of British children do not have enough energy and most do not get as much physical exercise as they should. A high proportion do not eat anywhere near the amount of fruit and vegetables that they require. In addition, some students start smoking when they are at school which obviously has huge health implications.

Schools can be very influential as far as children's choices about health are concerned because children spend about 15,000 hours at school during their lifetime! Schools can offer healthy snacks and meals, encourage students to keep hydrated and create a safe environment for young people to relax and learn. They can also apply to be part of the 'Healthy Schools' programme.

Issue 6: LITTER

Most people seem to agree that litter is a bad thing, yet it is frequently found in many areas of the world. Most of us will have noticed both small and large items of litter in the last month. A lot of the litter will not have been created accidentally, which is incredibly sad.

Most schools in the country tend to have some kind of litter problem. This doesn't just affect the people at the school. It can also affect wildlife and local people (for example if litter is blown into their gardens from the school grounds).

There are many ways to reduce litter in schools. More bins should be placed around the grounds and these bins should be in easily accessible places. In addition, different year groups might take responsibility for litter-picking at different times of year. It is also a good idea for the dangers of litter (e.g. tin cans on a school sports field) to be brought to the regular attention of all young people.

Issue 7: SCHOOL GROUNDS

Children and teenagers spend a considerable amount of time in school, and so the school grounds can have a big impact. If adults are seen to care about the school grounds, then students usually view them as valuable too.

Recycling and composting within the school grounds give students a strong message about how to be sustainable, as does the introduction of plant or animal species in specific areas of school. Children might also find it interesting to learn about which buildings in the school have been built/adapted with locally sourced materials.

Many kinds of lessons could be taught outside in schools, and assemblies or school council meetings could also take place there. In addition, anti-bullying areas and creative play equipment (even for teenagers) could have a huge impact upon the way in which school grounds are perceived by young people.

Issue 8: TRANSPORT

We all know someone who says that there are more cars on the roads than there used to be. This is true, and it affects many different things (such as the environment, health and people's decisions about public transport).

Unfortunately roads are becoming more congested. Congestion is thought by some experts to be contributing towards climate change. This is due to the fact that exhaust fumes contain various harmful chemicals. Roads are also becoming more dangerous which means that people are increasingly afraid to use bikes on the roads.

Schools can help students to make the right decisions about transport by providing them with clear information about car-share groups, public transport, cycle paths and safe routes for getting to place on foot. They can also reward children who cycle or walk to school and provide safe lockable areas for bikes. Rethinking travel plans is also an option.

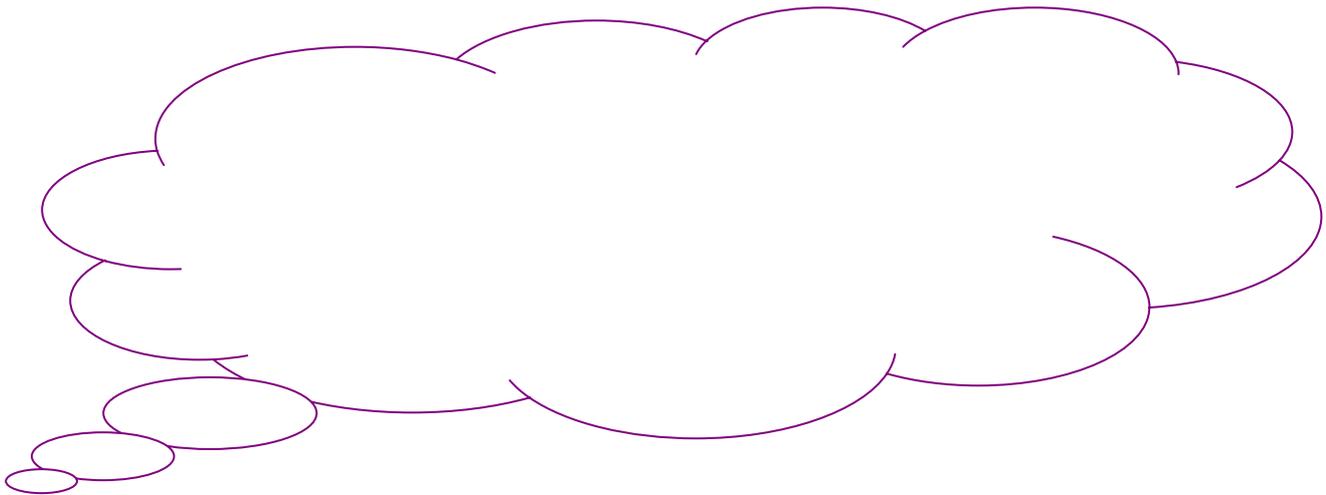
Issue 9: WASTE

Almost everything that humans do creates waste and unfortunately the world is now creating more waste than it ever has in the past. More than 430 million tonnes of waste is created in the UK alone every year! Most waste arises because people feel that they no longer want a particular product/they can no longer make use of it.

Most waste ends up being buried or burnt. Luckily though, some waste is recycled. This means that less energy is used and less pollution is created. It is desirable to recycle because landfills are becoming full. This has an effect on the health of people who live near landfill sites.

Schools can significantly reduce waste in many ways. They can introduce recycling bins to every classroom and can choose products based on the amount of packaging which they arrive in. They can encourage students to consider whether items that they are throwing away could be used by the art department. In addition, they can motivate young people to donate unwanted items to charity shops or to use websites such as 'ebay' and 'freecycle'.

Resource 3 – Letter to headteacher and governors



**Any school can apply to be an 'eco-school' so today you are going to take action!
You are going to write a letter to your headteacher and your governors which
encourages them to put your school forward for becoming an eco-school.**

Your letter will...

- need to be written in pen on plain A4 paper
- need a formal introduction and ending (and a signature)
- need to use polite and persuasive language
- need to mention the eco-schools website address.

In your letter you will need to explain

- why you want to get eco-school status...
- that schools can be given a bronze, silver or green flag (the colour depends on how eco-friendly schools are)
- some basic facts from your booklet
- ways in which your school can realistically tackle at least three of the nine of the issues in the booklet
- what you personally will be willing to do to help the school to become a more sustainable environment.