What is sustainable development?

The way we use the planet is unsustainable.

Large numbers of the world's population go hungry and don't have clean water, the way we burn fossil fuels is adding to climate change, we are depleting all sorts of resources and polluting our environment in a variety of ways.

Climate change is expected to lead to the spread of deserts, an increase in very large storms, more winter rainfall in coastal areas (including the whole of Britain), changing habitats and landscapes everywhere and rising sea levels, which would flood low-lying areas where millions of people live and where we grow huge amounts of the world's food.

Sustainability is not about keeping things as they are - things are not ok now.

It's about the needs of people – all of those alive now & future generations.

It is about ensuring that there will be enough energy, healthy food, clean air and water for everyone on the planet.

It is about improving the world and then trying to keep it ok for everyone.

The idea of conservation, in the sense of preserving things as they are, does not work. Our "normal" lives in Britain are changing the World, mainly because of our contribution to climate change because we burn fossil fuels to run our cars, heat our houses, power our fridges, transport food from exotic places and produce all the stuff we buy.

If we focus on looking after local habitats and don't deal with the big issues, like climate change, those habitats will be affected , sometimes destroyed, by the impacts of those big issues. If we consume fossil fuel energy in our efforts to preserve the local habitat we just make things worse.

We certainly do not want to preserve things as they are in the economically poorer countries. Most people there need access to more energy to ensure that they can improve their lives.

At present:

About 1000 million people in the world (that's approx 1 in 5 people) do not receive enough food to lead fully productive lives

More than 1 in 10 people on our planet consume less than the 'critical minimum diet' necessary to stay healthy and maintain body weight

40 million people die each year from hunger and hunger-related diseases

11 million babies and young children die each year from poverty-related disease

25,000 people die each day from using dirty water

A quarter of the world's adult population still cannot read or write

There are approx 10-15 million refugees currently unable to return to their own country due in almost all cases, to warfare. Half of these are children.

[statistics from *Designing for a Future* - Paul Howard Jones]

What do we do that adds to the problems?

- Burn fossil fuels directly in cars, heating our homes, schools etc,
- Eat food that has been grown with a lot of chemicals and has used a lot of energy in processing and packaging
- Buy food & other goods that have been brought from the other side of the world
- Buy lots of things that someone's been paid very little to make, use up materials, take energy to make & transport.

A sustainable world would have to be one where the whole of the world's population:

had enough healthy food
had a clean water supply
had adequate homes to live in
were free from the threat of violence, racism or discrimination
lived in a clean, safe environment
had access to good health services and education
could find beauty and fun around them

and this could continue indefinitely.

In order to achieve this we would have to burn less fossil fuels in the industrialised world, ensure that everyone has an equal share of resources, consume more locally produced products, stop using destructive chemicals in farming and industry and consume less useless products.
If we focus on the 'big' issues in this way then the other problems such as loss of biodiversity, local air and water pollution will be improved inevitably in the process.

Various definitions of sustainable development

There are a range of definitions of Sustainable Development. Most of them need a great deal more explanation of what they mean for us and our lives.

"Sustainability is essentially about humans' ability to learn, adapt and survive in changing circumstances"

"Development which meets the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainable development is about:

"ensuring a better quality of life for everyone, now and in the future. It involves the bringing together of social, environmental and economic issues into one over-arching objective"

"treating the Earth as though we intend to stay"

"living on Earth's income rather than eroding its capital"

"the interaction and interdependence of society, economy and environment, the needs of both present and future generations, the local and global implications of lifestyle choices"

"making changes to provide for the whole of the world's population while not destroying the environment."

"changing the world so that we provide for the needs of everyone on the planet now and future generations without destroying the environment."

The footprint

The 'footprint' is a useful and powerful teaching tool for analysing our impact on the planet. An 'ecological footprint' is the productive land necessary to support people in their lifestyle. Footprint researchers have calculated the potential productivity of the land and sea available on this planet and divided this by the population. If we allocate 12% of land for biodiversity, then our individual share of productive land is 1.9hectares.

It has been calculated that if everyone lived the average British lifestyle we would need 3 planets like earth to support us.

If everyone on the planet consumed the resources that the average person in Bangladesh does we would only be using a bit more than a third of the Earth's resources.

If everyone lived like the average US citizen we would need 5 planets.

20% of the world's population have 86% of the world's wealth.

Because so many of us are consuming so much, the total resources consumption of the 6 billion people now on the planet is using 1.5 times the resources available (we would need another half a planet to provide for present consumption sustainably).

Consuming more than is available seems impossible, but what we are doing is "spending the capital", ruining areas of the planet by polluting them, causing soil erosion etc and therefore reducing the amount of productive land available.

It would not be practical to try to just use our own individual 1.9 ha share. We can't each have our own little bit of sea and wheatfield. We have to look at sharing global resources efficiently.

A couple of questions to discuss -

1] does everyone need the same footprint at every stage of their lives? Do we need to use more resources when we are children, young people, in our working lives or retired?

2] supposing our country has got less land than we need to provide for our share (i.e. less than 1.9ha) what should happen?

The footprint can be used in teaching to make it clear who uses most of the world's resources and causes most of the environmental damage and who uses least.

It can also be used as a starting point to look at reducing our impact on the planet to a sustainable level. So, in the UK we have to reduce our impact to a third of its present level.

We then need a breakdown of our footprint which measures the impact of different activities so that we can focus our efforts on the ones that are really significant.

We can certainly identify some things that have a considerable negative impact -

Driving cars

Plane travel

Burning fossil fuels to heat buildings

Buying unnecessary goods

A diet that includes a lot of meat and processed foods

Why is climate change happening?

The overwhelming weight of informed scientific opinion now says that there is very strong evidence that the amount of fossils fuels that we burn is the biggest cause of the increase in the greenhouse Effect, which is the major cause of climate change [see IPCC & RCEP in Resources]. So, if we do things to 'benefit the environment' but do not do anything to reduce our use of fossil fuels, then we are merely tinkering around at the edges.

If we do not take into consideration the impact of our lifestyles (our energy use and our purchases) on people with very low incomes elsewhere on the planet, then we are not dealing with sustainable development.

Impacts of climate change

In talking about Climate Change and Global Warming, many educational resources say that "Some Scientists think that burning fossil fuels is causing an increase in temperature.....and Some scientists think that Climate Change is not happening".

This is misleading. The vast majority of Scientists, particularly those who have done the most detailed studies of Climate Change, are very seriously worried about it and think that there is overwhelming evidence that burning fossil fuels is the major cause of the increase in temperature.

Climate change is the big urgent threat but how does it relate to poverty and hunger?

Climate change will affect all of us (and may be doing so already) but it is the poor who will suffer worst and first. It is the poor who are affected most by flooding, major storms, desertification and droughts.

When climate change produces sea level rise which makes life impossible in Holland and Bangladesh, what will happen?

The population of Holland wont die, they will move. Accommodating these people will create big problems for the rest of Europe but it will happen.

The population of Bangladesh will have to try to move. It is difficult to make oneself imagine what would happen. It will create enormous problems for the neighbouring countries and it is impossible to imagine it happening without millions of people dying.

The people of Europe consume 3x their share of the world's resources. The population of Bangladesh consume a third of their share of the world's resources.

Who has caused the problems?

An approach to introducing the concept of sustainable development with a group

This is a way of starting to talk about sustainable development which works with groups from 10-year-olds upwards. It was developed for a situation where we only had a short time with a group. The process involves constructing a definition of sustainability with the group.

You need at least one whiteboard or similar and pens.

1) You could start by writing up the word sustainability and asking them what they think it means. Usually in a group someone knows that sustaining something is about keeping it going.

You could say that it is about keeping life on Earth going for humans.

You do need to state that sustainability is not about keeping things the way they are now because the world is not ok now. It is about improving the world and then trying to keep it ok for everyone.

You might prefer not to start with a long word like sustainability that they are unlikely to understand and you would therefore move straight on to step 2

2) Ask them what they think the really big problems in the world are, the things that they would like to change if they had 3 wishes (using the "three wishes" always seems to work).
   This can be done either as a whole group discussion or by getting them to discuss it in 2s or 3s and feed back their ideas.

Most groups respond very thoughtfully to this. They quite quickly come up with hunger, starvation, war and pollution. They often say disease and lack of water and sometimes "no education". I have had a KS2 group who said "poverty" first of all, another who said "we use too much stuff", 17-year-olds who included homelessness and a group of 20-year-olds who said "inequalities of wealth".

They do occasionally get bogged down in producing a catalogue of the various types of pollution and it is then sometimes difficult to draw them back to a broader view.

They sometimes start with a particular thing which is a very real issue in their local area but is a local rather than a global issue. One group who started with "chemical air pollution" came from an area dominated by industrial chemical works and for them this was a very obvious and real problem.

It is very important to pursue a discussion of what presents to them as the biggest problems and then to see how those things fit into a bigger picture.

Sometimes they will say "crime" or "smoking". All responses provide the opportunity to talk about how this particular issue fits into sustainability.

One ends up with a list of things that are wrong with the world that is something like this:

- hunger, malnutrition, starvation
- lack of clean water supplies
- homelessness
- war, violence, racism, discrimination
- pollution

but sometimes includes other things.

We then turn that on its head to say that:

in a sustainable world the whole of the world's population would:

- have enough healthy food
- have a clean water supply
- have adequate homes
- be free from the threat of violence or discrimination
- live in a clean, safe environment
- have access to good health services and education

(the precise wording varies with the group and I then add "beauty and fun". What would be the point of preserving the existence of people on this planet if we did not enjoy it?)

and this could continue indefinitely.

This leads into looking at what we do which makes this difficult and what we could do to move towards sustainability. Inevitably it leads you into talking about prioritising, into the relative significance of the actions we can take to improve the environment.

A different approach to this activity would be to provide a variety of problems, including hunger etc, written on cards so that they can discuss them in small groups and put them in order of importance.

A suggested list:

malnutrition	inequality	climate change
hunger	starvation	over-consumption
war	lack of water	lack of health services
violence	lack of clean water	lack of schools
racism	homelessness	
pollution	discrimination	

My overwhelming reaction to these discussions is that it is certainly an effective way to prompt extremely interesting and frequently very surprising discussions, which allow pupils to express opinions of a subtlety and perception that is impressive. I do not get the opportunity to follow up these discussions but I hope they provide a starting point for further discussion in school about how the school itself can behave more sustainably.

A footprint game

There are a number of ways this activity could be run. The basic idea is to make "feet" of various sizes which can be attached to the bottom of people shoes and then play a running around game. The game is a metaphor for living our lives – we can't do it with feet which are either too big or too small.

You will need a template of a large footprint, about 3 times the size of an average foot. Everyone will cut out card footprints (from some scrap cardboard boxes).

These should be tied under the soles of shoes or feet and then try to play a running game. It is very difficult to do this (you need to make sure that it is not so difficult as to become dangerous).

Explain that this is our footprint – the impact we have on the planet – we'd need 3 more planets like Earth to provide for the amount we consume in Britain.

In the words of a 10-year-old "we use too much stuff".

It needs to be made clear to everyone that this large foot *does* represent our real impact.

Then you could introduce a footprint which is five times bigger than an actual foot and a number of small ones, about one third of a real foot. The small ones will need to be made of something thick, like 2x2 wood, and probably not foot shaped as that would be a lot of work (drill a hole through the wood so that they can be tied on). It really might be dangerous to try running around with these feet so you might choose to just discuss what it would be like.

At the end, discuss the problems caused by having such a large 'footprint'. In the real world the size of our 'footprint' is posing a threat to our survival. Also discuss the impact of having "small" feet. Most of the people with a small footprint have very difficult lives and need more resources.

There are two important outcomes of this game. One is that people understand that different people on the planet do have very different impacts on it and the other is that they see the *relative* importance of the different things we do. They can then start to think about how we can all reduce our impact.

% of footprint of different activities (from the Wales footprint study, WWF 2002) :

people travelling around	11%
using energy directly (heating, electricity etc)	10%
food production, processing, transportation	34%
things we consume (services as well as goods)	41%
land for building	3%

(developed by Ann MacGarry of CAT as introductory activity for Woodcraft Folk camp of 4000 people in 2001)

The World map and the footprint

Draw out a map of the world on a large sheet of material.

Get six pupils to come and stand on the land areas. The map needs to be the right size for all six of them to just get their feet on the land masses.

Explain that each of them represents one billion of the six billion people on the planet.

Then get one of them to come off the map and put on a pair of very large cardboard feet (at least three times a normal shoe). They then get back onto the map. In order to do this they have to push some of the others off into the sea (they have the power to do this).

The one with the large feet of course represents the population of the richer countries.

Prompt discussion by asking questions. For example:

What will happen to the ones pushed off into the sea?

Could they stop this happening?

How can we stop this happening?

Which are we?

[activity developed by Tom Cullingford for the *New Future for Wales* project.]

Creating a culture of sustainability throughout your school

If the school is to become a more sustainable environment then changing attitudes is the most important thing. An essential element is to develop enquiring minds so that pupils go on trying to find out what is happening to the world and what they can do about it. The picture changes all the time. Research into issues such as climate change is increasing and adding to our knowledge all the time, and this is clearly going to continue. Pupils need to be equipped with the skills to feel that, as the discussions evolve, they will be able to follow them. They need to be able to ask the right questions.

You need to work towards creating a culture of measuring everything by sustainability; a culture of constant evaluation which becomes second nature. But, whatever you do, don't lose your sense of humour. Don't forget the need for fun. An oppressive moralistic atmosphere would not be positive. What's the point of perpetuating human life on the planet if we are not going to enjoy it? Also, in many situations you are forced by circumstances to do or buy things which are not ideal, so you just have to do your best.

If pupils' and teachers' attitudes really change then so will behaviour. It is very important that pupils are enabled to make changes which they can see and measure in their own lives and that of the school.

Eventually, involving the whole school community will be vital if real and lasting change is to be achieved. Start with whoever is keen and build on that. Small groups of pupils can be a catalyst to start the process of change. Many schools set up some sort of committee or group of pupils and others to steer this work. Some schools set up training for all of their staff to engage them in the process. In some cases one person (teacher, governor or parent) may plug away at the issues for years until they get enough other people interested to make something happen.

Making meaningful changes in peoples thinking and lifestyles results from them getting an understanding of what the issue of sustainability is all about and feeling that they can do something.

The most urgent threat to the life of people on the planet seems to be the impact of climate change , so if we do things to 'benefit the environment' but do not do anything to reduce our use of fossil fuels, then we are merely tinkering around at the edges. If we do not take into consideration the impact of our lifestyles (our energy use and our purchases) on people with very low incomes elsewhere on the planet, then we are not dealing with sustainable development.

There are very many things which can be done in schools, some which address the 'big issue' of burning fossil fuels and others which make the local environment pleasanter. Both are part of the process. Very often the biggest impacts are made by doing things which most people do not see (like replacing the central heating boiler with a much more efficient one) while things like preventing littering which has a mainly aesthetic impact, are very visible. It is worth getting rid of litter because it is quite easy to do, pupils feel that something is happening, they get into habits of care which they will hopefully carry into other areas of activity and litter looks horrible, but arguably it's presence has virtually nothing to do with sustainability.

What things can be done in school?

1) Discuss & measure

Discuss what sustainability/sustainable development are all about and what changes pupils and teachers could make in their own lives at school and home

Involve pupils in the decision making

Measure energy use (fuel for heating, electricity, fuel for cooking and heating water – amounts and pattern of use over the year), transport patterns, waste (rubbish) produced (amount and type), food eaten (where from, how processed, packaged and stored), litter

Doing things does not have to wait until you have measured everything and worked out a strategy, but it would be very useful to be able to do a 'before and after' comparison. As they do the measuring, pupils will hopefully start to suggest things that could be done and their enthusiasm should be tapped. There is a great danger of killing pupils' enthusiasm by always saying "not yet….", "first we must…."

2) Encourage people to treat each other well

Sustainability is all about caring for the whole of the present population, future generations and the natural environment. These values can't be prioritised without caring for the community that one is part of. Strong anti-bullying and anti-racist action is an essential part of sustainability.

3) Integrate sustainability issues into curriculum

Obvious areas are Citizenship/PSE, Geography, Science, D&T but there is huge potential in Maths and Languages and opportunities in History, RE and Drama

You can even relate it to PE by looking at fitness and talk about diet, exercise and the amount of walking and cycling that pupils do now compared with in the past.

Producing active citizens is now a role for schools. Many decisions and changes needed to move us towards a sustainable society have to be made beyond the personal level by local Councils, Assemblies and central Government. Pupils need to see what their role is as active citizens in a democracy in taking part in the political process.

4) Reduce use of cars

Staff & pupils

- Set up car share schemes
- Develop use of buses and trains

Enable more walking & cycling

- Encourage setting up of 'walking bus' (where appropriate)
- Investigate cycle tracks
- Provide safe storage for bikes

5) Change patterns of consumption of food, snacks, drinks

Increase purchase of fair traded goods.

Don't get a snack machine. encourage fruit eating (particularly locally grown apples and pears when possible and fair traded bananas)

Don't get a drinks machine. Have tap water readily available. encourage pupils to bring re-usable water bottles to school

6) Reduce energy used to heat school

(There is funding available to partly support action on this in England and Wales)

Change the heating boiler

Improve heating controls

Insulate

Draught strip

Close doors

Displaying meters so that pupils can measure and monitor improvements is important

7) Reduce electricity used for lighting

(There is funding available to partly support action on this in England)

Change type of bulbs

Re-position lights

Fit automatic controls

8) Reduce other electricity use

Turn equipment off when not needed

9) Reduce water use

There is an Environment Agency guide for schools on saving water

10) Reduce waste going to landfill

Acquire less in the first place

Re-use paper & other materials (e.g. in DT)

Recycle what you can

Use recycled materials

Compost food (if possible) & paper/card waste with grass cuttings, apple cores etc.

11) Plant trees

Why plant a tree?

This is a good thing to do for a variety of reasons. Trees are beautiful, create habitats for animals, hold the soil together, absorb CO2 and can be used as a renewable fuel or a building material when cut down. You could teach aspects of the Science curriculum through tree planting.

However, planting trees is not the most effective way of reducing the Greenhouse Effect. We would have to plant so many trees to absorb the CO2 that we produce that it would take up too much land (in fact the 3 planets worth calculated by the footprint analysts).

there is no sign yet of any 'magic' solution that will just mop up our pollution and allow us to go on using resources as we do.

12) Improve the appearance and feel of the school environment

Remove litter

Develop grounds

Create pleasant spaces for people

Grow plants & build ponds to encourage biodiversity

Put up bird (bat?) boxes

13) Use renewable sources of energy

Buy 'green' electricity

Install solar water heating

Install some wind and solar electricity generation. This is unlikely to be economic on the scale that schools can install it but could be a very useful educational tool. (Large windfarms in windy places are economic)

14 Engage with Council, MPs etc

Pupils may reach a point where they want to ask elected representatives about their policies and actions.

Who can you involve?

Pupils

Non-teaching staff

Governors

Pupils' families

Local Agenda 21 officer (each local authority should have one of these, often now called "Sustainable Development Co-ordinator")

Discussing objects and situations – what about sustainability?

An interesting next step is to use examples of objects and situations and talk about how they relate to sustainability. Anything can be discussed in this way.

There are some basic questions to ask about any item –

- What use is it?
- Who needs it?
- Who wants us to have it (buy it)?
- Did it use up resources to produce – raw materials, energy resources?
- Does it use up resources in use – raw materials, energy resources?
- How was it transported? How far?
- What's the effect on the local environment – any benefit? Any pollution?
- Does it contribute to the Greenhouse Effect / Global Warming (has any fossil fuel been used)?
- Is it harmful to anyone's health?
- Does it do anything to reduce global poverty (and therefore hunger) or make it worse?
- Is it worth the space it occupies?

Those useful cardboard tubes

Take a few Pringles packets, get pupils to look at them in groups, discuss the following questions:

- What materials have been used for packaging?
- What can you do with these materials after eating the contents?
- What are the Pringles made of?
- Look at the ingredients. What are they?
- How have the Pringles themselves been made?
- Where were they made?
- How did they get here? (method of transport)
- What is the nutritional value of the Pringles themselves?

You can discuss processing, packaging, additives, food miles, consumption and waste disposal.

Most pupils think that they are made by just slicing potatoes and frying them so it is interesting to discuss what actually happens and the machinery and energy used to manufacture them, not to mention the production of the wide range of additives.

The packaging makes recycling difficult. The cardboard is nicely coated with waterproof layers that make composting difficult and the plastic and metal are not labelled. Anyway recycling is not a magic, no-impact solution to dealing with rubbish.

Do they know what the additives are or why they have been used?

All Pringles now seem to have been imported from Europe. They used to come from the US. Ask the pupils how they think they were transported.

How much do you pay for your potato?

You could bring in potato in a variety of forms -

- Potatoes, as locally grown as possible
- Potatoes locally grown and organic
- Oven chips (the package from frozen ones)
- Crisps
- Pringles

You need to know the prices of all of them.

There are all sorts of other possibilities - potato waffles etc.

Get the pupils to analyse them in groups and comment on:

- Cost of potato per kg
- The story of the product from potato being dug out of the field to ending up on their plate and disposing of the waste
- Energy used, including processing and transportation
- Time spent in a freezer

Frozen flying food

Check out your local supermarket for out-of-season fruit and vegetables and buy some samples. (This can be quite expensive.) Get something that probably came by boat and something that is sure to have been flown.

Ask pupils where they think they have been grown and how they got here (ship, plane, frozen, chilled). Most pupils do not have a clear idea of what grows when and where because most things can be bought in shops all year round.

Strawberries grow outside or in unheated greenhouses in Britain around June. In the Winter they are grown in heated greenhouses or imported from hotter countries. When imported they come chilled or refrigerated in planes. Refrigerators are heavy users of electricity because they are on all the time. Plane freight transport has a footprint that is eighteen times as great as transport by sea.

The useless plastic toy mountain

Collect a pile of those little plastic toys and ornaments that all children acquire and few ever play with (the sort of things that get given away with burger meals). Ask how many of the class had ever actually played with them for more than a couple of minutes after they acquired them. Discussing whether it was worth anyone using the energy and materials involved in making them.

Then move on to asking what toys and games are worth making. Things which last and get a lot of use. Pupils normally come up with some interesting suggestions, including the football, skateboards and board games.

If it seems appropriate, you could move on to discussing the value of games which involve people playing together as opposed to those where people play alone.

Frequently they will suggest computer games, play stations etc. as sustainable. Many of these things are promoted as a sort of fashion item so that they will want to buy the latest version. This is exactly the sort of consumption which is damaging to the environment. Many such toys use small batteries. Pupils usually think that using such small batteries saves energy, whereas the reality is that they are extremely inefficient in energy terms and they contain damaging chemicals (some rechargeable batteries are better).

Buying bananas and chocolate.

The choice in the local Co-op is 'organic', 'fair-traded' or 'ordinary'.

All cocoa and bananas are imported thousands of miles. They can come by sea rather than air. (Ships use far less energy that planes to transport the same goods the same distance).

Most cocoa and bananas are grown with pesticides which are harmful to the health of the workers spraying them. Most workers are paid extremely low wages, have no opportunity to get other jobs, cannot join a union and have no rights (much cocoa is in fact grown with the involvement of slave labour, often of children). Workers are not given adequate protective clothing or information about the sprays they are using. The chemicals used destroy the local ecosystem and leave the soils impoverished so that they can be easily washed away.

The organic cocoa and bananas are grown without the use of these pesticides so the working conditions are healthier, the soil is preserved and improved. The workers may still be on very low wages with no rights and no choice.

The fair-traded cocoa and bananas have been grown by people who have been far more empowered. They are paid a fairer price for their work, they may be in a co-op or own their own small farm, they can get information about chemicals they are using, they are in a position where they may be able to move towards more organic production. Their families will be adequately fed and poverty is reduced.

Which would you buy?

Would you buy bananas at all?

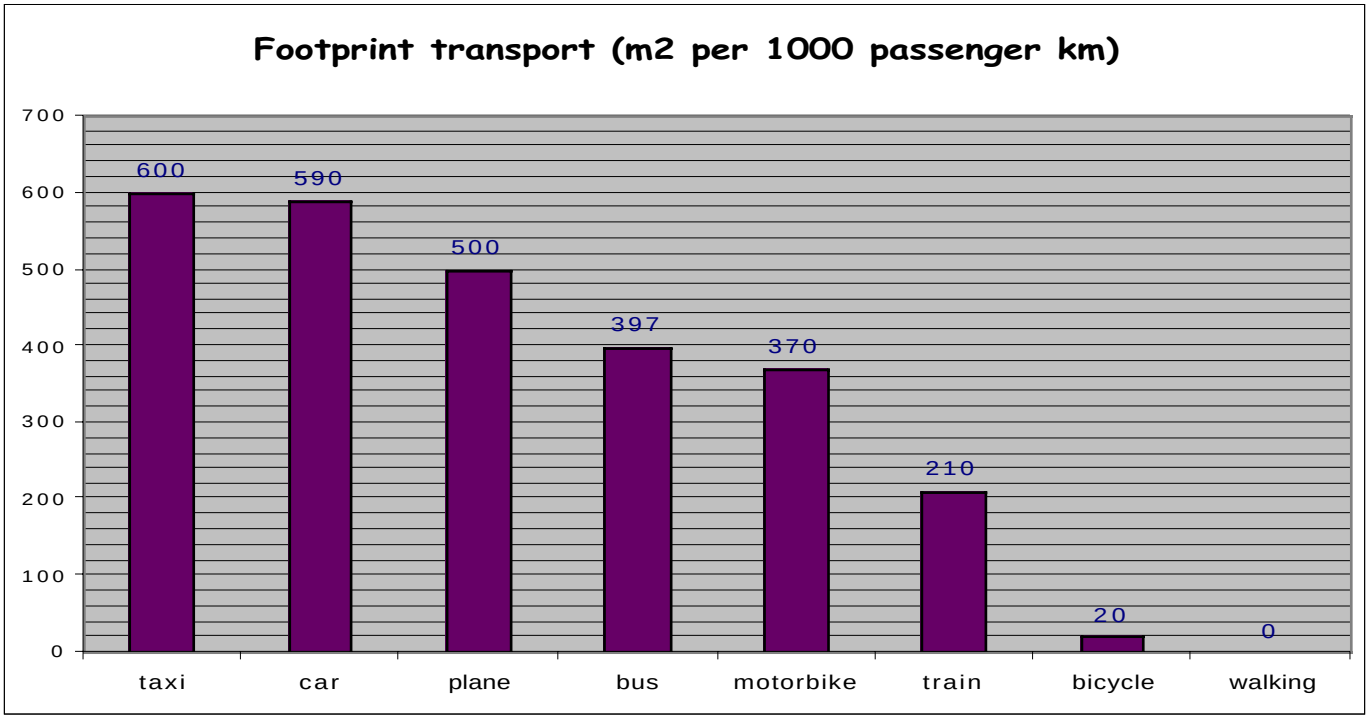
How do you get to school?

Less and less children are walking to school and more and more are becoming overweight and unfit.

Driving cars produces CO2 which adds to the greenhouse effect and nitrous oxides which add to acid rain and causes local air pollution.

Get the group to find out how far everyone in the class travels to school and how they travel.

Why do they travel the way they do?
What alternatives are there?
How can the footprint be reduced?



Drinks machines in schools

Many schools have drink machines which dispense chilled fizzy drinks in cans.

What's the nutritional value of the drinks?

How much do pupils spend on such drinks?

The cans are usually aluminium. It takes a great deal of energy to produce aluminium from bauxite and it only takes a twentieth of that energy to recycle used cans into new aluminium.

But recycling always has an impact.

The drinks machine took energy and resources (metals and plastics) to make. It consumes energy to chill the drinks and operate the dispensing system.

In the past there used to be drinking fountains in school playgrounds where pupils could get water any time.

So, what difference does it make if you -

Pick up litter around your school

Litter looks ugly.

For most things the real impact was caused in producing them before they ever became litter.

If the rubbish is an apple core it shows that someone ate something healthy. The core will rot away. If it is thrown in a bush it will nourish the soil and it may not even be noticed. The same is true of any food waste, paper or cardboard (but meat or cheese products would encourage rats).

Whether we litter or not doesn't make any difference to anyone much beyond the playground.

If the apple core is put into a rubbish bin it will end up in a landfill site where it will produce methane, which is a powerful greenhouse gas. If it is put into a compost bin it will produce useful food for the soil.

Walk or cycle to school (rather than being driven in a car)

You reduce fossil fuel (petrol or diesel) burned and therefore CO2 produced and greenhouse effect and climate change.

You reduce acid rain, which damages buildings and trees.

You reduce local air pollution.

It makes you fitter and healthier.

You save money.

Get your parents to insulate and draughtstrip your home

Assuming your home is heated by gas, oil or electricity, you will reduce fossil fuel (petrol or diesel) burned and therefore CO2 produced and greenhouse effect and climate change.

You may reduce acid rain and local air pollution.

Your family will save money.

The house will probably be more comfortable (less draughty).

[What is sustainable development – CAT Education Dept 01654 705983]