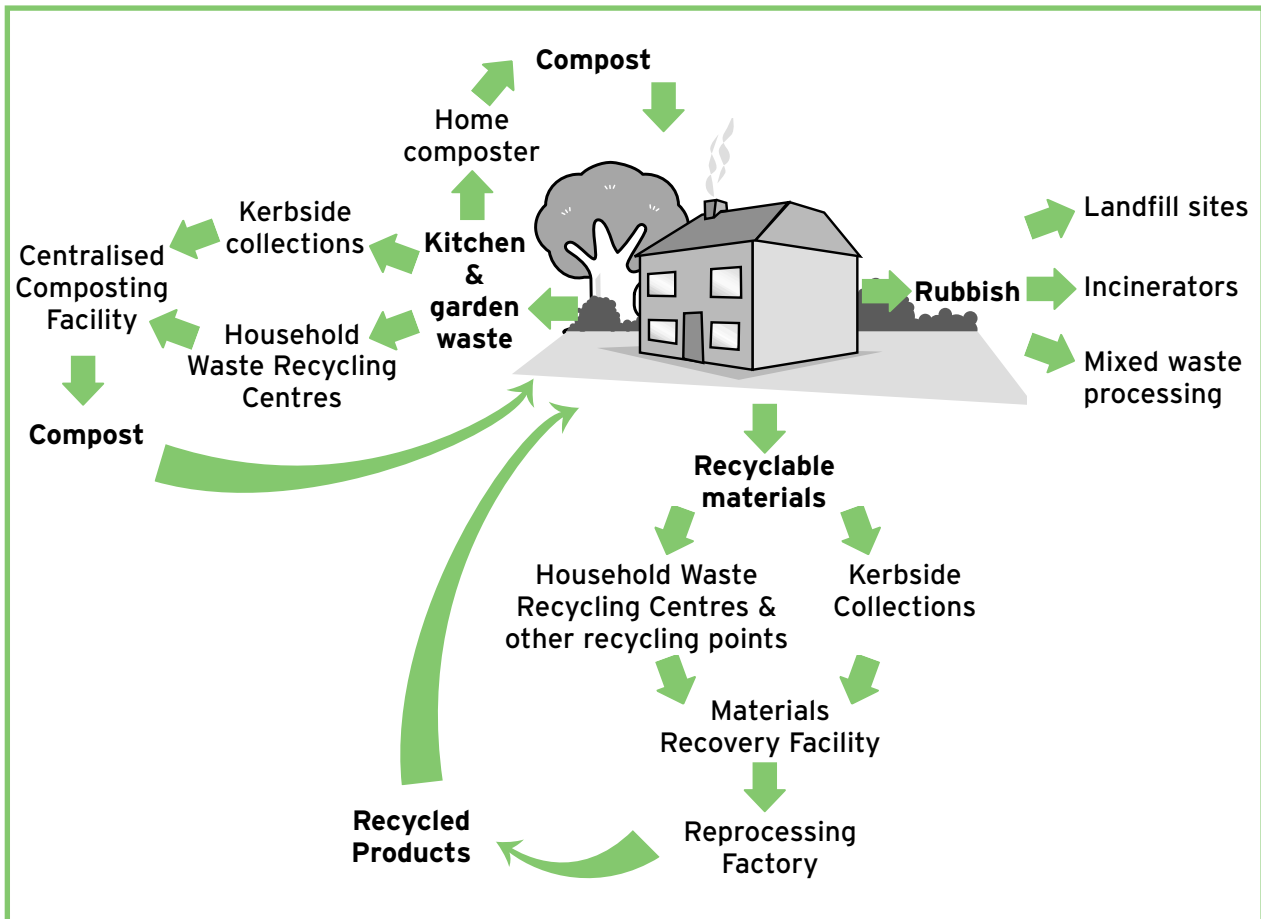


Waste in Hertfordshire

This chapter describes what happens to the waste of Hertfordshire residents. It explains why new laws on waste disposal are making changes necessary.

Where does YOUR waste go?



Waste Collection

Your district or borough council, as a Waste Collection Authority (WCA), is responsible for the collection of household waste and organises the collection of materials for recycling. It also collects litter, keeps the streets clean and deals with dog mess.

It does this by:

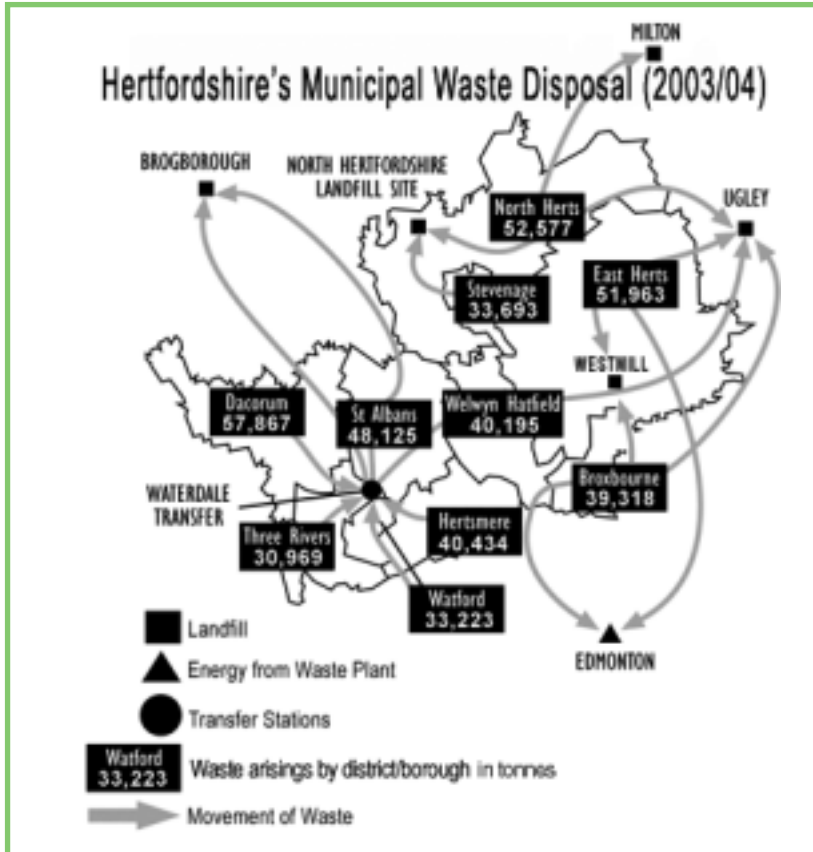
- Regular refuse collections from households;
- Kerbside recycling schemes;
- Recycling points for community use;
- Street cleaning programmes;
- Dog waste bins.

The County Council provides the Household Waste Recycling Centres.

Refuse collection from households

- Waste, in either sacks or wheeled bins, is collected regularly from homes using a refuse collection vehicle.
- The refuse collection vehicles squash the waste. This saves space allowing more rubbish to be collected each trip.
- This load is then taken either directly to a disposal point or a waste transfer station (e.g.

Waterdale at Watford) where it is put into much bigger lorries to be transported to a disposal site such as Brogborough landfill site in Bedfordshire. This diagram shows the disposal routes for Hertfordshire's municipal waste in 2003/04. The majority of municipal waste is household waste, but also included in these figures is a small amount of trade waste and road sweepings.



Kerbside collection

Kerbside collection schemes encourage people to recycle through the provision of boxes, bins or bags for recyclables. The householder puts the container out at the boundary of the property on a regular collection day. It can be difficult to provide kerbside collections for flats and rural locations although many councils are trying to change this.

Different materials then go to different places to be recycled. That's why recyclables have to be

kept separate. Some authorities have collection vehicles which have different compartments for the recyclable materials.

Other authorities sort everything out later at a Materials Recovery Facility (MRF). A MRF is a facility which separates, processes and stores materials that have either been collected separately or mixed in with other waste. From the MRF recyclable materials are loaded into bigger lorries and taken to recycling factories and the remaining waste is taken away for disposal.

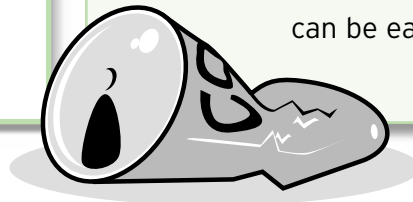
Recycling Points

Recycling points are located at many sites across Hertfordshire. Ideally, journeys to recycling points should be combined with other journeys to save energy. For example, recycling banks are often found in supermarket car parks. The local Council makes sure the banks are emptied regularly. Materials then start their journey to be recycled into new products. For more information on what happens to individual materials see the relevant section in **Material Types**.

Recycling banks shouldn't be used at night to avoid disturbing people living nearby.

**Do you know where your nearest community recycling point is?
Find out at www.wasteaware.org.uk**

Recycling banks often fill up fast. An easy and efficient way of making more space is to squash the containers. Cans, cardboard boxes and plastic bottles can be easily squashed.



Household Waste Recycling Centres (HWRC)

Household Waste Recycling Centres are places where residents take their waste, recyclable materials and other unwanted items. Collection containers include those for glass, cans, foil, textiles, paper, cardboard, garden waste, wood, mobile phones, fluorescent tubes, engine oil, scrap metal, fridges, freezers, car batteries and more.

These materials are then taken for recycling. The operator will also separate out items which can be re-used such as electrical items and furniture. Only items, which cannot easily be recycled, re-used or composted should go into the waste disposal containers. Your local site can be found on www.wasteaware.org.uk

Street cleaning and litter

Litter is anything from sweet wrappings to bottles, cans and fast food containers. It makes the streets look untidy and it can attract vermin such as rats. It can also harm animals and birds - they can get trapped in bottles and jars and some die as they eat the packaging as well as the food scraps inside it.

Dropping litter is against the law. Keeping our streets clean is everyone's responsibility so take your litter home or put it in a bin.

There are lots of 'litter bugs' around so the local council works hard to keep the streets clean and tidy. It employs litter pickers and people to empty bins and deal with dog mess.

Everything collected from our streets joins the rest of the rubbish and is taken to disposal sites.



This symbol is used on packaging as a reminder not to drop it.

Dog waste bins

Dog mess is harmful to people's health. The Dogs (Fouling of Land) Act 1996 orders that it is the responsibility of dog owners to make sure that their dog does not foul public land - this includes

pavements. Dog owners can buy specially made scoops and bags to use and many parks now have dog waste collection bins which are emptied regularly.

Flytipping

Flytipping is the illegal dumping of waste usually in the countryside. It is a growing menace. Each week many incidents of illegal dumping of unwanted materials get reported. If caught, flytippers can be fined up to £20,000! The Environment Agency and councils are now using secret cameras, sometimes hidden in drinks cans to catch the culprits.

Your local council is responsible for clearing up waste from fly tipping on public land. If you see anyone dumping rubbish, you should report it to the council as soon as possible.



Waste Disposal - What Happens Now?

What happens to the rubbish in the bin after it has been collected? Hertfordshire County Council, as the Waste Disposal

Authority (WDA), arranges the disposal of your rubbish. Currently the majority of Hertfordshire's waste is sent to landfill.

Landfill sites

Landfill sites are large holes in the ground where sand, gravel or rock have been dug out of the earth leaving empty quarries. These can be filled with rubbish, covered with soil and then restored back into a green area. There are over 3,000 landfill sites in the UK in which 85% of household waste is buried.

Landfill sites have to be carefully planned so they don't cause a nuisance to people living nearby, either by smells or with all the lorries arriving with waste. Landfill sites also have to be carefully monitored and looked after to prevent environmental pollution. Different sites take different kinds of waste.



What happens to waste at a landfill site?

At the landfill site, vehicles are weighed and the amount and type of waste is recorded. Waste is only emptied into one part of the site at a time. These units are called cells. At the bottom of modern landfills there is usually a 'liner' to prevent pollution. This may be a layer of clay which doesn't allow polluted water to seep through (it is impermeable) or a special plastic layer or both.

During the day, lorries empty their loads into the site where the waste is spread and rolled down. A heavy vehicle drives back and forwards over the material. This process, called compaction, means that the air is squeezed out and more waste can be

put in. At the end of the day all of the waste is covered with a layer of soil to prevent vermin and birds getting to it. The layer of soil also helps to reduce litter and bad smells. When one part of the site is full it is covered with a thicker layer of soil (called a cap) which is then planted or landscaped. The site will be looked after for many years. Closed landfill sites have been used as grassland or farmland. Modern uses include planting them with trees to make an urban or community forest, creating a wildlife area or using them as building land if suitable.

What happens as the waste rots?

As the waste decomposes (rots) it releases gases and liquids which must be dealt with carefully to prevent pollution. Landfill gas contains methane (55%) and carbon dioxide (45%). If the methane cannot escape from within the landfill, it builds up and can cause explosions. To prevent this happening, some landfill sites release the gas through a pipe. It may then be burnt to generate energy to heat or power nearby homes and factories or used on site.

Using the gas in this way gives it a value and helps reduce its impact upon the environment, however some gas still escapes. Methane gas is a powerful 'greenhouse gas' which contributes to climate change and global warming. 21% of the total UK methane emissions are estimated to come from landfill sites.

The liquid produced from landfill is called leachate. As water trickles through the buried solid waste, it can pick up toxic and poisonous heavy metals such as mercury, zinc, lead and cadmium. Other chemicals are formed as the waste breaks down. Bacteria and viruses from disposable nappies are present too. If any of this liquid leaks into surface or underground water supplies, it can cause water pollution and be a hazard to people's health. To counter this landfill sites may be lined, or sited where the rocks are impermeable or systems are installed to catch the liquid and treat it before disposal to sewers.

Regulations controlling landfill are now much better than 20 years ago. New landfill sites are well designed with proper measures to prevent pollution.



Incineration with energy recovery

In Hertfordshire about 7% of waste is sent to an incinerator in Edmonton. Incineration plants are large buildings that burn solid waste producing heat for heating schemes or electricity generation. Ideally, most recyclable materials are removed beforehand but magnetic metals can be extracted from the ash after burning. The ash from the incineration process is taken to landfill sites.

Incineration plants produce gas emissions which need careful monitoring and filtering to remove toxins. There continue to be arguments about the level of polluting gases that come from these plants and their effects on people's health and the environment.

Waste Disposal in the future

The reliance on landfill to dispose of our ever increasing waste must change in the next few years for a number of reasons:

- Hertfordshire is due to run out of suitable holes in the ground to use as landfill sites.
- It is not sustainable to transport the waste long distances to landfill sites elsewhere - which are also dwindling in number.
- The Landfill Directive means that we have to reduce the amount of biodegradable waste sent to landfill.
- The landfill tax makes landfill an increasingly expensive option.

Because of public concerns over emissions from incineration plants and the short timescale available for gaining planning permission, the councils have ruled out the option of constructing new incineration plants in Hertfordshire. Therefore new ways need to be found to treat the waste which isn't separated for recycling.

Waste Treatment

There are new technologies that treat the waste so that only a small residue is left to go to landfill sites. At the moment the Hertfordshire Waste Partnership is looking at three processes that remove various resources such as metals, glass, plastics and biodegradable materials for recycling.

These are:

- **Anaerobic Digestion**
- **Gasification and Pyrolysis**
- **Mechanical-Biological Treatment**

More detail can be found on these by looking at Hertfordshire's Waste Strategy on www.wasteaware.org.uk



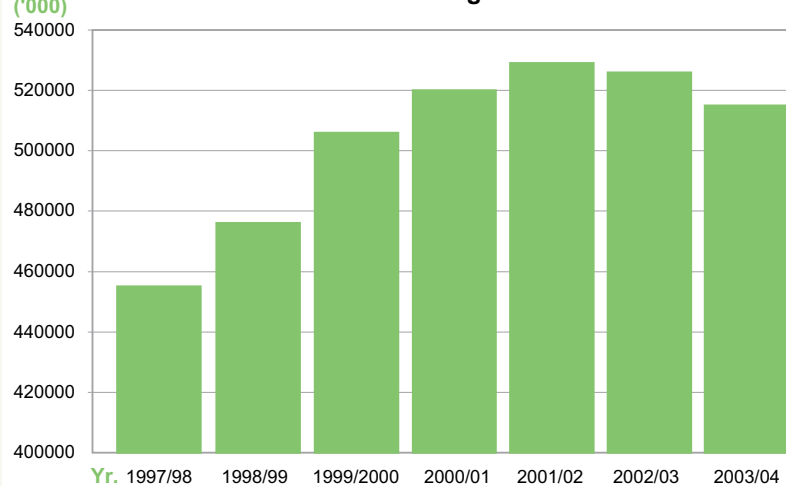
WasteAware

It is important that people change their attitudes towards waste so that they understand that the items they currently throw away are actually materials which have a value as a resource and can be used again.

In a year the average Hertfordshire household produces just over one tonne of waste - the equivalent of about 200 plastic sackfuls. This equates to a staggering half a million tonnes of waste being produced in Hertfordshire every year - enough to fill the Titanic over 5 times!

Tonnes ('000)

Growth in household waste generated in Hertfordshire



The **WasteAware** campaign was launched in 1997 as a partnership of the eleven Hertfordshire Councils to increase public awareness of the problems surrounding household waste disposal in Hertfordshire and to encourage residents to reduce, re-use and recycle their waste.

Hertfordshire needs to increase the amount it recycles to meet the targets set by the Government to recycle 30% of its household waste by 2005/6. In 2003/4 Hertfordshire recycled 22% of its household rubbish. Check the WasteAware website for up to date statistics on how much rubbish is collected and recycled in Hertfordshire.

Combating the growing amount of rubbish in Hertfordshire is not easy; it needs everyone to help. All the local authorities - the County, District

and Borough Councils are working together on waste reduction and recycling schemes. This is why the **3 R's - REDUCE, RE-USE, RECYCLE** - are so important. As the graph above shows, the amount of waste generated by Hertfordshire households increased steadily until 2001/02. However, it would appear that waste reduction principles are now playing a greater part in waste management. Since 2001/02 the total amount of waste generated has begun to decrease. Making an effort to cut waste is sustainable. Less waste to dispose of also means lower Council taxes. But there is no room for complacency; re-use and recycling is vital!

The main message from the Hertfordshire WasteAware Partnership is that you **can** make a difference by taking action at home, school, the office or when you are shopping.

Details of the campaign can be found on www.wasteaware.org.uk

Alternatively email: wasteaware@hertscc.gov.uk or call the **WasteAware Helpline on 08457 425000** for more information.

Local Information

Each local authority in Hertfordshire offers recycling facilities to residents. Each authority has different schemes in place, which are continually being updated. For the most up to date information on facilities in your area contact your local Recycling Officer (see page 143 for details).



Broxbourne

Here is a snapshot of the recycling facilities available to residents in Broxbourne Council in January 2005.

Refuse collection

Each household has a black sack weekly collection of refuse, collected from the property boundary.

Recycling collection

Broxbourne Council offers residents a fortnightly kerbside collection.

Each household should have 1 box for:

- Cans and tins, glass bottles and jars; newspaper, magazines, telephone directories (not Yellow Pages) and junk mail.

A green wheeled bin is provided for a fortnightly collection of garden waste.



Dacorum Borough Council

Here is a snapshot of the recycling facilities available to residents in Dacorum Borough Council in January 2005.

Refuse/Recycling collection

Each household should have:

- 1 green wheeled bin for cardboard, garden and organic kitchen waste
- 1 grey wheeled bin for materials that Dacorum cannot recycle

The wheeled bins will be collected on alternate weeks.

Two recycling boxes will also be provided for the collection of newspapers, magazines, junkmail, plastic bottles, food and drink cans and aerosols. The recycling boxes are collected on a weekly basis.



East Herts District Council

Here is a snapshot of the recycling facilities available to residents in East Herts District Council in January 2005.

Refuse Collection

Each household has a wheeled bin for the weekly refuse collection. Only refuse placed inside the closed wheeled bin will be collected.

Recycling Collection

East Herts Council offers a kerbside collection of paper to residents in urban areas. Households included on the scheme have a fortnightly collection from a green box supplied by the Council. Households in Bishop's Stortford, Ware, Sawbridgeworth and some of the villages have a brown wheeled bin that is provided for a fortnightly collection of garden waste.



Hertsmere Borough Council

Here is a snapshot of the recycling facilities available to residents in Hertsmere Borough Council in January 2005.

Refuse Collection

Each household should have a wheeled bin for the weekly refuse collection. Only refuse placed inside the closed wheeled bin will be collected.

Recycling Collection

Hertsmere Borough Council offers residents a fortnightly kerbside box collection for newspaper, magazines, telephone directories (not Yellow Pages) and junk mail.

A green wheeled bin is provided for a fortnightly collection of garden waste.



North Hertfordshire District Council

Here is a snapshot of the recycling facilities available to residents in North Hertfordshire District Council in January 2005.

Refuse Collection

Each household should have a wheeled bin for the weekly refuse collection. Only refuse placed inside the closed wheeled bin will be collected.

Recycling Collection

North Hertfordshire District Council offers residents a fortnightly kerbside collection. Each household should have 2 boxes, one for each of the following:

- Any colour glass bottles and jars in the black box
- Newspaper, magazines, telephone directories (not Yellow Pages) and junk mail in the blue box

Some residents will have a brown wheeled bin for a fortnightly collection of garden waste. This scheme is gradually being expanded until all residents have one.



St Albans City & District Council

Here is a snapshot of the recycling facilities available to residents in St Albans District Council in January 2005.

Refuse Collection

Each household should have black sacks for the weekly refuse collection.

Recycling Collection

St Albans District Council offers residents a fortnightly kerbside collection. Each resident should have 1 box for:

- Plastic bottles, cans and tins
- Newspaper, magazines, telephone directories (not Yellow Pages) and junk mail.

There are also pilot schemes for the collection of card, garden waste and glass bottles in white and green sacks and grey boxes respectively.



Stevenage Borough Council

Here is a snapshot of the recycling facilities available to residents in Stevenage Borough Council in January 2005.

Refuse Collection

No bin is provided to households, instead each household receives 52 black sacks (one per week) during May/June each year. (Sacks purchased by householders can also be used) .

Recycling Collection

Stevenage Borough Council offers residents a fortnightly kerbside collection. Each household should have two boxes for the following:

- Red Box for glass bottles and jars
- Divided Blue Box which has one section is newspapers, magazines, telephone directories (not Yellow Pages) and junk mail; the other side is for mixed food and drinks cans

In addition from March 2005 all households will also have a brown wheeled bin provided for the fortnightly collection of garden waste.



Three Rivers District Council

Here is a snapshot of the recycling facilities available to residents in Three Rivers District Council in January 2005.

Refuse Collection

Each household should have a wheeled bin for the weekly refuse collection. Only refuse placed inside the closed wheeled bin will be collected.

Recycling Collection

Three Rivers District Council offers residents a fortnightly kerbside collection.

Each household should have 3 boxes, one for each of the following:

- Plastic bottles, cans, tins and aerosols
- Glass bottles and jars
- Newspaper, magazines, telephone directories (not Yellow Pages) and junk mail

A brown wheeled bin is provided for a fortnightly collection of garden waste.



Watford Borough Council

Here is a snapshot of the recycling facilities available to residents in Watford Borough Council in January 2005.

Refuse Collection

Each household should have a wheeled bin for the weekly refuse collection. Only refuse placed inside the closed wheeled bin will be collected.

Recycling Collection

Watford Borough Council offers residents a fortnightly kerbside collection.

Each household should have 3 boxes, one for each of the following:

- Plastic bottles, cans, tins and aerosols
- Glass bottles and jars
- Newspaper, magazines, telephone directories (not Yellow Pages) and junk mail

A green wheeled bin is provided for a fortnightly collection of garden waste.



Welwyn Hatfield District Council

Here is a snapshot of the recycling facilities available to residents in Welwyn Hatfield District Council in April 2005.

Refuse Collection

Each household should receive a regular refuse collection. Residents provide their own bins or sacks which need putting out for kerbside collection.

Recycling Collection

Welwyn Hatfield District Council offers residents a fortnightly kerbside collection for recyclables.

Each household should have 2 boxes:

- A Red Box for glass bottles and jars
- A Green Box for newspaper, magazines, telephone directories (not Yellow Pages) and junk mail

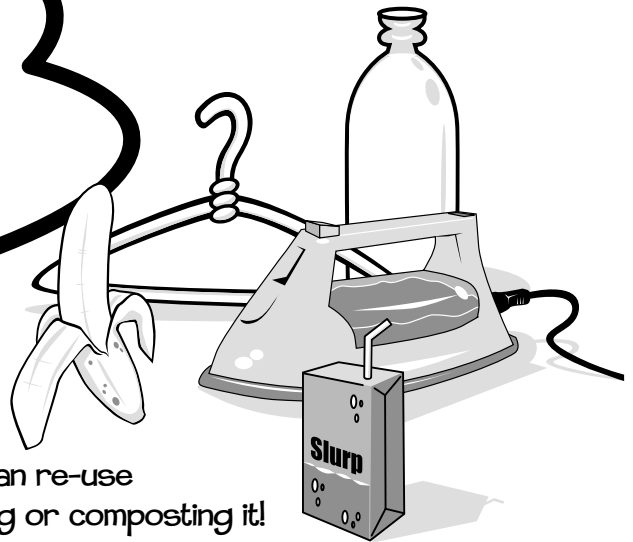
A brown wheeled bin or a special (payable) council sack is used for a fortnightly kerbside collection of compostable garden waste.

YOUR NAME

TODAY'S DATE



Sort your Waste



Tick on the grid which category each item fits into. Some may fit into more than one category, e.g. you can re-use a comic by passing it onto a friend as well as recycling or composting it!

Only put something in the throwaway category if it won't go into any of the others.

	Repair	Re-use	Recycle	Compost	Throw away
Newspaper or comic		✓	✓	✓	
Metal coat hanger					
Books					
Desk Lamp					
Iron					
Video recorder					
Envelopes					
Mobile phone					
Flowers					
Banana					
Unwanted t-shirt					
Pair of shoes					
Fast food packaging					
Vegetables					
Toy car (battery powered)					
Drinks can					
Cuddly toy					
Milk bottle					
Nappy					
Plastic shopping bag					
Shoe box					
Table and chairs (bare wood)					
Drinks carton					
Plastic bottle					

www.wasteaware.org.uk



On the left side of the homepage select the specific waste advice for 'householders' from the drop down menu.

Then explore the site to answer these questions!

Question	Answer
1. What is the telephone number of the WasteAware helpline?	
2. How many Household Waste Recycling Centres (HWRCs) are there in Hertfordshire?	
3. In the section 'About Us', what do the 3 R's stand for?	
4. In 'The Problem' section, how many tonnes of waste did households in Hertfordshire produce in 2002/03?	
At the top of the screen on the A to Z bar, hover the mouse over the letter...	
5. 'G' Now move the mouse and click on 'Glass'. Is it just bottles that can be recycled? What raw resources are saved by recycling glass?	
6. 'C' Now move the mouse and click on 'Cardboard'. What do WasteAware ask be done to cardboard packaging before it goes in the cardboard container?	

Use the information on glass, or another material, to help you design a recycling poster for use in a recycling campaign.

YOUR NAME

TODAY'S DATE



www.wasteaware.org.uk



On the left side of the homepage select the specific waste advice for 'householders' from the drop down menu.

Then explore the site to answer these questions!

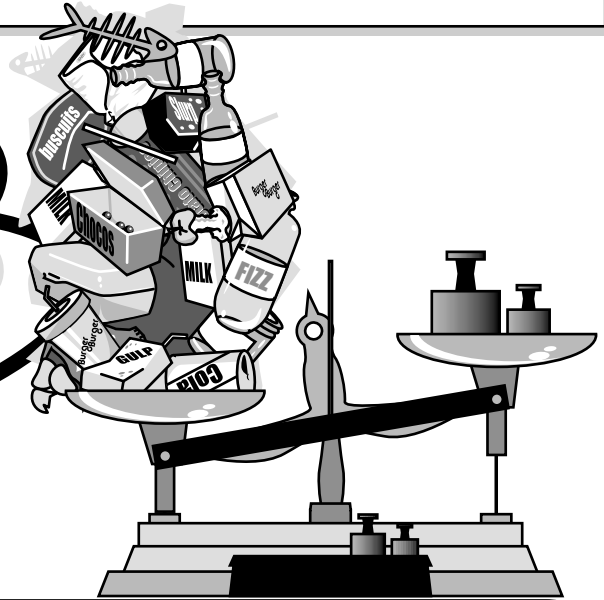
Question	Answer
<p>About us and contacting us</p> <p>1. Who are the partners in the WasteAware Campaign?</p>	
<p>2. What is the telephone number of the WasteAware helpline?</p>	
<p>3. What do the 3 R's stand for?</p>	
<p>The problem</p> <p>4. How much waste did dustcarts collect in Hertfordshire in 2002/03 collect?</p>	
<p>5. Name the landfill sites used by Hertfordshire County Council.</p>	
<p>6. How many of the sites are outside Hertfordshire?</p>	
<p>7. What is the cost of disposing of Hertfordshire's waste every year?</p>	
<p>Prevention</p> <p>8. How many Household Waste Recycling Centres (HWRCs) are there in Hertfordshire?</p>	
<p>9. What is the purpose of the HWRCs?</p>	
<p>10. Where is the nearest HWRC to your home? (hint: you'll need to know the postcode of your home)</p>	

www.wasteaware.org.uk

Question	Answer
11. Name at least 10 materials that can be recycled at this HWRC.	
12. Closing the 'recycling loop' by buying recycled products is important. What is the website suggested on the 'Links' page as a source of buying recycling products?	
<p>13. C</p> <p>Now move the mouse and click on 'Cans (steel)'.</p> <p>How many times can a steel can be recycled? Can aerosols be recycled too?</p>	
<p>14. N</p> <p>Now move the mouse and click on 'Nappies'. How many disposable nappies are sent to landfill everyday?</p>	
<p>15. G</p> <p>Now move the mouse and click on 'Glass'. Why does WasteAware ask you to rinse bottles and jars before recycling them?</p>	
<p>16. C</p> <p>Now move the mouse and click on 'Cardboard'. Name one type of cardboard that you cannot take to HWRCs, and why?</p>	

at the top of the screen on the A to Z bar, hover the mouse over the letter...

What's in your Teacher's Bin?



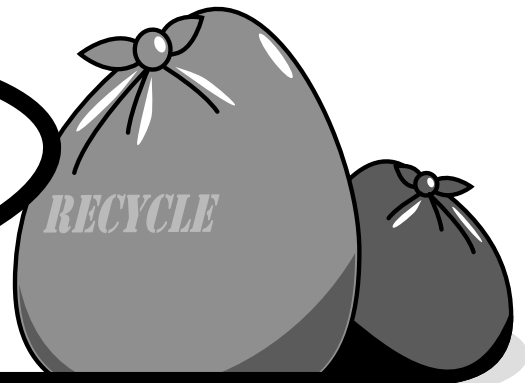
Type of Waste	Weight in grams	What does your teacher normally do with it? (e.g. throw away /recycle / compost /charity shop)
Paper and card		
Metal		
Food waste		
Plastic		
Glass		
Mixed		
Mixed (2)		
Other		
Other		
Total amount of waste		

YOUR NAME

TODAY'S DATE



What's in your Teacher's Bin?



How much waste is generated in a typical day/week in your teacher's house? Answer in grams or kilograms.	
How much of that waste is sent for recycling / re-use?	
How much waste is your teacher's household likely to generate in one year? Answer in kilograms	
Is the type of waste likely to vary from one day to the next? Why?	
Think about your own household. How could it cut down on the amount of waste it creates in a year?	
Do you think your household could recycle more of its waste? If yes, how?	

Extension

Using graph paper or a computer program, draw a bar graph to show the proportion of waste by weight in each category from your teacher's bin (e.g. paper, plastic). **Remember to label each axis.**

Next

1. Colour in blue the materials that YOU currently recycle.
2. Colour in red the materials that YOU could recycle/re-use.
3. Colour in green the materials that YOU wouldn't have bought in the first place.
4. How much rubbish would be left if YOU had done all of the above?

5. Is it a good thing to throw away as little as possible?
Why?

What a load of Rubbish!



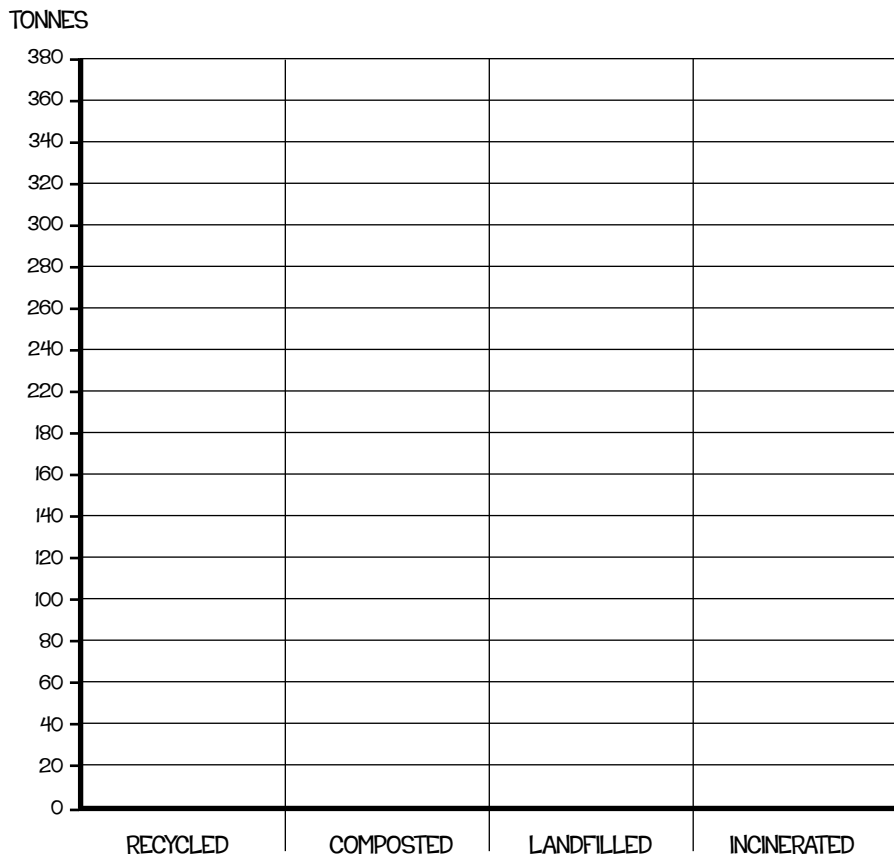
You are preparing a report on waste in Hertfordshire for the County Council.

Graph 1

Draw a bar graph to show how the 'rubbish' collected in Hertfordshire in 2003/2004 was dealt with. Use the data opposite in the table. Shade in each bar of graph with a different colour.

	Amount of 'rubbish' in 2003/2004 (in 1,000 tonnes)
Recycled	80
Composted	30
Landfilled	365
Incinerated	35

A bar graph to show how 'rubbish' in Hertfordshire was dealt with in 2003/2004



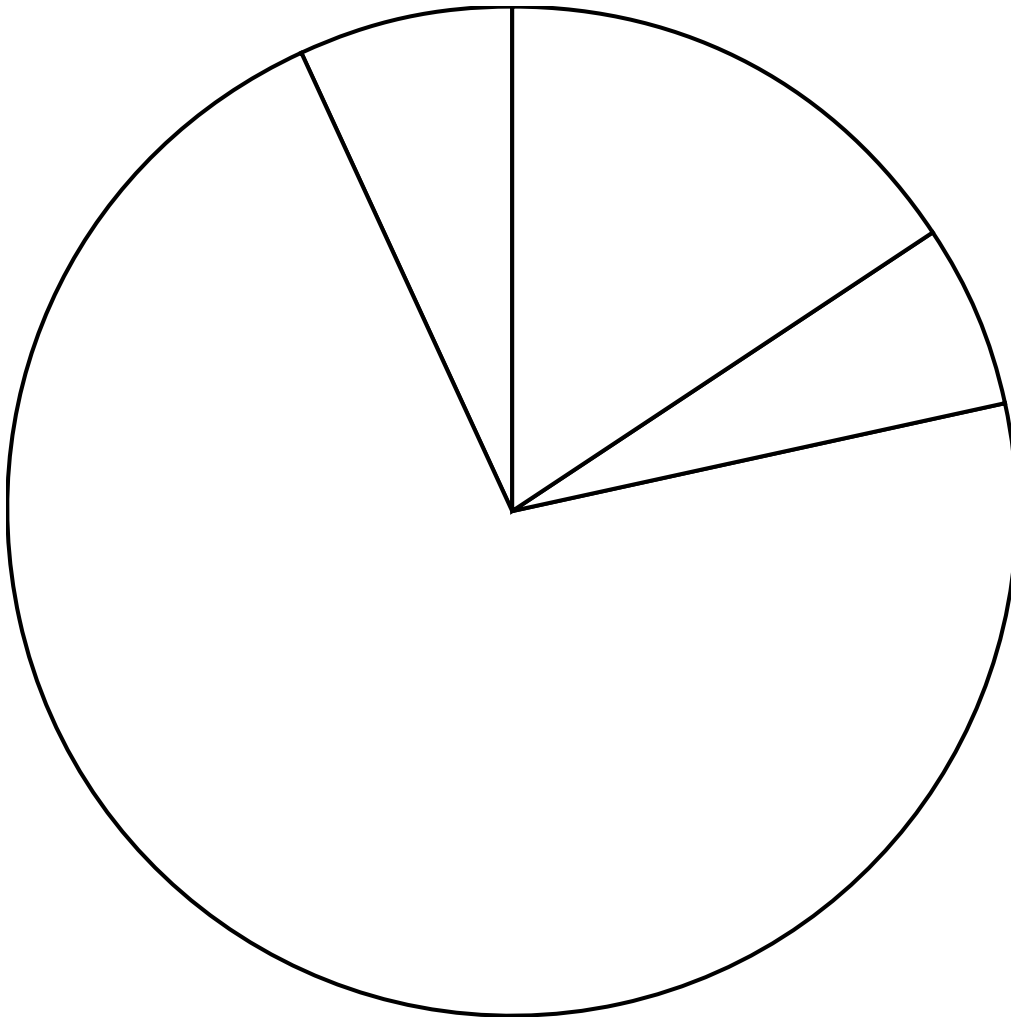
YOUR NAME

TODAY'S DATE

Graph 2

In reports it is sometimes useful to see the same data presented in different ways. On this pie chart shade and label each of the sections in the circle using the same data used to draw Graph 1. Use a different colour for each section.

A pie chart to show how 'rubbish in Hertfordshire was dealt with in 2003/2004



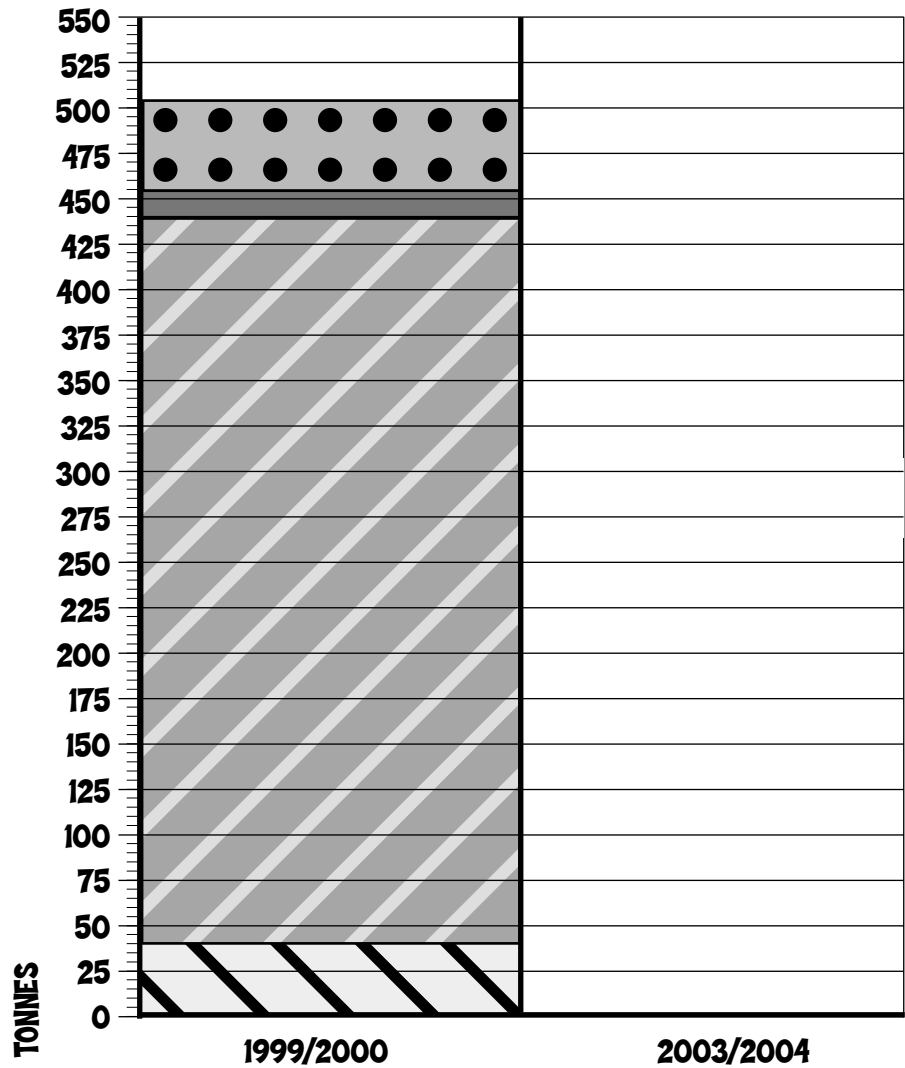
Why do you think this is called a pie chart?

Graph 3

The County Council would like you to complete the graph below. Your teacher will help you with this.

A stacked bar graph of how 'rubbish' in Hertfordshire was dealt with in 1999/2000 and 2003/2004

-  Recycled
-  Composted
-  Landfilled
-  Incinerated



- 1) In what way was most of Hertfordshire's waste dealt with in 2003/2004?

- 2) When was the most 'rubbish' recycled? In 1999/2000 or 2003/2004?

- 3) Was more or less 'rubbish' composted in 2003/2004 than in 1999/2000?

- 4) Was more or less 'rubbish' landfilled in 2003/2004 than in 1999/2000?
Why do you think this is?

YOUR NAME _____

TODAY'S DATE _____



Litter



You are going to find out how much litter there is in your school.

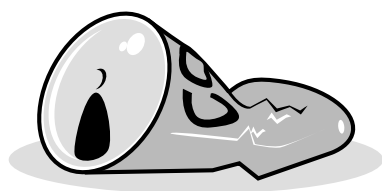
Use the table below to record the items of litter you collect.

Type of litter...	How many?	Total...
paper		
glass		
metal		
food scraps		
plastic		
wood		
other		



Tick the box that best describes litter in your school

- Our school is free of litter
- Our school has very little litter
- Our school has quite a lot of litter
- Our school has litter everywhere



Litter



You investigated how much litter there is in your school grounds. Now complete the table below.

How did you do it?

What did you find out?

Where do you think the litter came from?

Is litter a bad thing?

What are your suggestions for reducing litter?

FOLLOW that Lorry!



After your teacher has told you about Emma's homework, read the story and answer the questions at the end.

"Hello, Emma. I'm Wiz, spider 'extraordinaire' in charge of Web Adventures Inc. So you want to know why you shouldn't drop litter. Well..."

He was just about to start when a tatty old lorry rumbled by. "Come on!" Wiz shouted rushing over to a bike. "Nothing like the real thing. Let's follow that lorry. I know what those two no-goods are up to. Jump on!"



"But that's far too slow. We'll never catch them up on that!" protested Emma.

"Oh yes we will!" Wiz laughed. "See all these legs? That's real pedal power!"

They hurtled off up the road. Emma hung on, exhilarated and terrified at the same time.

The lorry stopped by a riverbank and reversed to the edge. Wiz and Emma hid behind a leafy bank. Two men got out.

"This'll do," said the ugliest of the two rubbing his hands. "Dump it here and let's get out of it before anyone sees us. It will save us a load of money not going to the dump."

Wiz nudged Emma. "Watch this!" he whispered.

As they reached the water's edge, a fish appeared standing on its tail. "Excuse me sirs!" it enquired in a very posh voice. "Are you thinking of leaving that rubbish here?"

"What did you say?" growled the ugly one looking at his mate.

"Nothing!" said the other. "I thought it was you".

Then they saw the fish. It asked again if they were going to leave the rubbish. "You see," it said, "all that rubbish poisons us and makes us ill. Of course if you catch us on one of your fishing trips and eat us then you'll get all your poison back. But that's only fair isn't it? Have a nice day!"

It went back under the water and swam off. The men looked at each other. Scared out of their wits, they jumped in their lorry and decided to go to the dump after all.



YOUR NAME

TODAY'S DATE



FOLLOW that Lorry!



Questions

Some of the answers are in the story.
Others you will have to think about.

1. What kind of animal is Wiz?
2. What did Emma and Wiz chase on the bicycle?
3. Why do you think Emma was exhilarated and terrified at the same time? Describe a situation when you have been excited and scared at the same time.
4. Why did the two men not want to take their rubbish to the dump?
5. If the waste had come from their home, what kind of things might have been in it that could poison the water and the fish?
6. What clues are in the story to suggest that Emma was dreaming?
7. After this, Wiz takes Emma to talk to some of his animal friends who have been hurt by rubbish not discarded in the proper place. Continue the story in the same style to include:
 - a) a small animal that was trapped in a empty drink can,
 - b) an animal that was caught up in a piece of fishing line left on the bank,
 - c) an animal that stuck its head into a plastic bag while trying to get to some food still left in it,
 - d) an animal that stepped on a broken bottle,
 - e) an animal that tried to eat a piece of chewing gum.
8. Colour the picture of the fish in the river and write your own caption of what the fish might be saying to the two men.



Where shall we put our Waste?

"Wastenot is a small town situated in a farming area. The District Council is responsible for collecting and disposing of household waste. The landfill they use is almost full and next year, somewhere else will have to be found. The Council also wants to encourage recycling and needs to have a few recycling sites where local people can take their unwanted bottles, cans, garden waste, fridges and so on."

List the advantages and disadvantages of using each of these sites.



Facility	Advantages of the site	Disadvantages of the site
Landfill		
Incinerator		
Household Waste Recycling Centre		
Residential recycling centre		
Supermarket car park recycling centre		

Dustbins: an endangered species?



Your local reporter finds dustbins are becoming an endangered species. Should there be a campaign to conserve them?

Wheeled bins are a revolution, replacing the traditional dustbin all over the country. On 'bin day' the wheeled bins line up along the pavement with military precision, ready to be emptied into the passing refuse truck. But why are they so popular? What was wrong with the dustbin lined with its black plastic bag?

The Council has supported its decision, giving your reporter a list of good reasons.

1. Wheeled bins are cleaner, safer and more hygienic, especially around children and animals. The lid doesn't get blown off in a strong wind and the foxes don't scatter rubbish over the street.
2. They should last a lifetime.
3. They are easier to move around because they have wheels - dustbins are heavy and can cause back strain.

4. They can be emptied automatically into the refuse collection vehicle making the work safer for the refuse staff.

5. We will only collect what is in the bin, so we are encouraging people to reduce the amount of waste they throw out.

Many local people agree wheeled bins are a good thing. "These bins are much larger than my old dustbin", said one resident, "I can get twice as much rubbish in it." Another person commented

"I hated trying to tie up the black sack, it was always too full. Now I just put the rubbish in the bin and wheel it to the front gate."

But the old fashioned dustbin and plastic sack still have their defenders as your reporter found out when talking to some other local people.

"Some people around here can't be bothered

to sort their rubbish because they can get it all in the bin", commented a householder who was also a member of Friends of the Earth, "we should be doing more to reduce our waste".

I visited one street of terraced houses where most of the bins had to be left by the front door.

"Just look at them" commented a retired lady, "they are a real eyesore, but where else can people put them?"

One man commented that with all the extra machinery needed on the back of the lorry, there is less room for the rubbish. "How many more times does it have to go to the tip?"

The Council says the wheeled bins are here to stay. They reckon they will reduce the amount of waste being thrown away and increase the recycling rate.



I know that Word...

Meaning	Word/Phrase
An area of land, often an old quarry, where waste is taken, dumped and covered with soil.	
Reclaiming a waste product so it can be processed and used again.	
Using natural resources in such a way that they can be used again and again.	
Using natural resources in such a way that they cannot be used again.	
Something we no longer need or want and wish to dispose of.	
A furnace in which waste is burnt and reduced to ashes.	
A bin or other structure in which organic waste is turned into compost.	
A mixture of organic materials that has rotted down from organic matter such as food scraps, garden waste and vegetable peelings and is used to improve the quality of soil.	
Materials that rot down, for example potato peelings.	
Materials that do not rot down, for example glass.	
The programme organised by the Councils in Hertfordshire to improve public awareness of waste issues and the opportunities for reducing waste.	
The gas that is produced when waste decomposes in a landfill site. It can be used as a source of energy.	
Materials that are found in nature and which people use to improve their lives, for example oil, soil, water.	
A resource that is used in a factory to make something from, for example sand is used to make glass, wood is used to make paper.	
The toxic / poisonous liquids that form in a landfill when materials rot down and mix with rainwater.	

biodegradable, incinerator, natural resources, compost, raw materials, WasteAware, sustainable, waste, composter, non-biodegradable, recycling, unsustainable, methane, landfill, leachate

www.wasteaware.org.uk



Check out the website for
more information on
reducing, re-using and recycling
in Hertfordshire