

Some of the little things that people flush down the toilet can cause big problems! The sewer system is designed to carry wastewater away from our homes and businesses to be cleaned up.

Anglian Water's sewer system helps keep our customers safe from harmful germs and protects the environment. However, sewer pipes can sometimes get damaged or need to be replaced.

The sewer network

The network of sewers and drains which transport our wastewater is more than 43,751 kilometres long and contains pipes and sewers of many different sizes. Some are huge – big enough for an adult to walk through. Some are much smaller, like the soil pipe which carries the water away from our toilets which is only 10 centimetres wide.



↑ A huge sewer pipe being laid in Cromer

A costly problem

Every year Anglian Water spends around £5 million unblocking sewers. When a blockage occurs, solid material in the wastewater builds up into a large lump which can stop the wastewater flowing freely and sometimes block the pipe completely. This can cause wastewater flooding and **pollution**, which can ruin people's homes and be devastating for the environment, as a small amount can cause a lot of harm to wildlife.

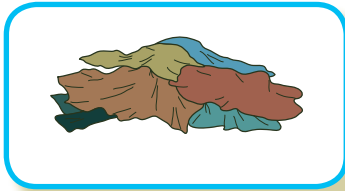
Be sewerwise

More than two-thirds of all blockages are the result of people putting things down the sewers that shouldn't be there. Some of the strangest items we have found in the sewers over the years have included mattresses, bicycles, fridges and shopping trolleys. We have even found false teeth in our sewer system! How do you think they got there?

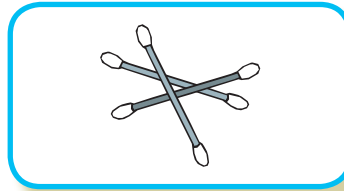


Bag it and bin it – don't flush it

To help prevent blockages in your own sewers and pipework, here is a list of some things that should be put in the bin – not flushed down the toilet or forced down the sink:



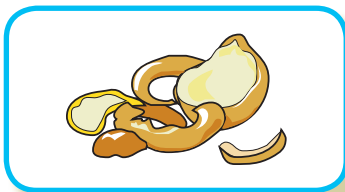
rags



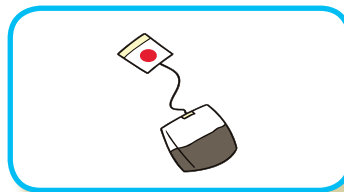
cotton wool buds



nappies



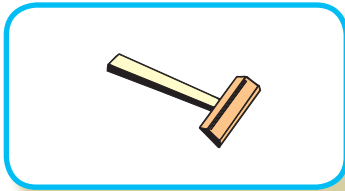
vegetable peelings



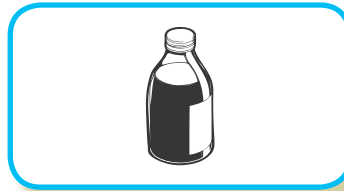
tea bags



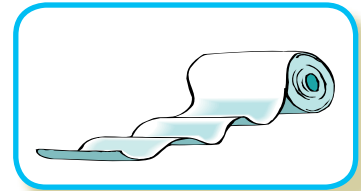
dental floss



disposable razors



pills/medicine



kitchen roll

It stinks when you put FOG down the sink

Fat, oil and grease (we call it FOG!) is sometimes left in the pan when we have finished cooking. Instead of letting the fat cool and scraping it into the bin, some people rinse it down the drain with hot water, not realising the consequences. Fats are liquid when they are hot, but solidify when they cool, blocking your sink and pipes and sometimes causing flooding. The build-up of fat can also make a nasty smell and even attract rats!



Fat power!

Anglian Water scientists are investigating uses for the waste fat that we create at home and in restaurants and businesses. For example, fat can be converted into biodiesel – a fuel which can be used to power cars. There are, on average, 10,000 tonnes of fat in Anglian Water sewers, which could create enough fuel to run 8,000 family cars for a year!



Rinsing waste fat, oil and grease (FOG) down the drain can lead to expensive blockages, bad smells and even flooding. You can collect waste fat in a container and use it to create a bird cake.

⚠ Safety warning

This Activity requires an adult to demonstrate it. It involves creating a bird food cake using excess animal fat from the cooking process.

Hot fat is extremely dangerous and can cause serious burns, so it must not be handled by children at any stage of the process. Please also note that the Activity is ideally suited to be carried out in the winter, as the fat cakes will melt in hot weather.

☀ Use a fat trap to make a bird cake

You can help Anglian Water and wildlife by creating a bird cake which you can use to feed the birds!

Fat contains lots of energy, so it is a great help for bird life in the winter, when food is scarce. Your bird cake is also less likely to melt in the winter than in the heat of the summer sun.

Learning objective:

To make a bird cake out of leftover fat and learn how to recycle waste.

You will need:

- A clean container made from a heat-proof material such as glass or ceramic
- Bird seed or nuts
- Dried fruit
- Old rubber gloves
- String



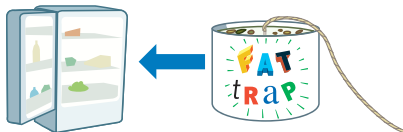
What to do



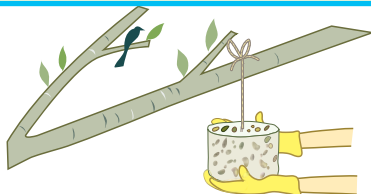
- 1 Once you have chosen the container for your fat trap, decorate it in any way you like. Remember to label it, so that people know what it is!



- 3 Sprinkle some nuts, seeds, oatmeal or even dried fruit into the fat trap. Ask an adult to stir them in for you.



- 5 Put the fat cake in the fridge to turn hard (solidify). The process may need to be repeated several times before the bird cake is big enough.



- 7 Either hang it up from a tree, or turn it out onto a bird table for the birds to enjoy safely out of harm's way. You might want to use rubber gloves to handle the cake to keep your hands clean.



- 2 When an adult has cooked some meat which has left some animal fat in the pan, wait for it to cool a little, then ask an adult to carefully tip or scrape it into your fat trap.



- 4 Ask the adult to insert a piece of string into the centre of the fat cake if you wish to hang it from a tree.



- 6 Once the fat has solidified, you can use a spoon or blunt knife to loosen the fat from the trap.

Why not watch your bird cake from a distance, or indoors, using a pair of binoculars? You can then observe the birds eating it and even use a wild bird guide to identify them.

