

Flush fighters

Background

When we go to the loo, all we want to do is flush and forget. But it's not that simple.

We live in an age of convenience where disposable items are used and thrown away. Products such as wet wipes for faces, hands and bottoms; cotton wool; tissues; nappies; cotton buds and dental floss are often thrown down the loo, instead of the bin, without any thought as to what happens to them, causing blockages in the sewers.

The packaging on many of these products says that they are 'flushable' BUT the bad news is these items don't just disappear; they clump together and can cause sewers to block. When blocked, sewage (poo!) and water backs up and can flood homes and gardens, causing misery for families, or overflow into rivers and seas. We need to make sure that doesn't happen.

Aims

- Children understand what causes blocked sewers and the impact at home and to beaches, seas, lakes and rivers
- Children learn what not to flush! Only flush the 3 ps (pee, poo and toilet paper) and understand why LOVEmyBEACH asks people to 'Think before you flush'
- Children take the message home to family and friends

Curriculum links

- **Geography** learn about local issues and map local rivers and coastlines, introduction to the water cycle and habitats.
- **Science** introduction to a simple experiment model; using materials, method, result and conclusion approach.
- **English** through group discussion on the characteristics of a LOVEmyBEACH beach.
- **Maths** take part in a beach clean and survey marine litter found on the strandline/beach, analyse data and work out the top ten most found items.

- **Citizenship** learning about local issues – how working together can have an impact and how our actions can affect others

Stop the block!

Shows how drains get blocked when items that should be thrown in the bin are instead flushed down the toilet. Out of sight, out of mind! Experiments 1 and 2 are best done in an outside area to illustrate what happens when pipes are blocked. Experiment 3 is suitable for indoors.

Materials for each group:

1. Large measuring jug
2. Clear plastic tubing – 10cm diameter
3. Bucket
4. water
5. Wet wipes, toilet tissue, cotton wool, cotton buds
6. 5 – 10 corks
7. Small, clean plastic bottles such as water an juice come in with labels removed

Key words:
toilets, flushable,
wipes, bin, sewer,
blockages, pee,

Experiment 1 – Toilet Tissue ‘Stop the block!’:

- Place toilet tissue into one end of the tube, enough to trap the corks when they are sent down the other end of the tube
- Pour water down the open end of the tube a little at a time (use jug and funnel) until the tissue begins to dissolve,
- When you see the tissue begin to dissolve in the water and break up, add more water slowly down the tube enough to move the blocked corks and wash them completely through the tube.
- Measure and record the amount of collected water.



Experiment 2 – Cotton wool, wet wipes cotton buds ‘stop the block!’:

- Place cotton wool, wet wipes and cotton buds into one end of the tube, enough to trap the corks when they are sent down the tube
- Pour water down the open end of the tube a little at a time (use jug and funnel) until the water begins to soak into the items

- Add more water slowly down the tube to try and make the blocked corks move. Can you wash them completely through the tube? What happens to the corks when you add more water?
- Measure and record the amount of collected water.

Experiment 3 – cotton wool and wet wipes ‘stop the block!’

- Place cotton wool, wet wipes and toilet paper into a separate clean plastic bottle each and fill with clean water from the tap.
- Label each bottle with what’s inside and the date you started.
- Making sure the lid is on tightly, shake each bottle and keep on a shelf. Regularly shake the bottles and watch what happens to the contents over time.
- Keep a log of changes to the contents and compare with the other bottles.

Conclusion: How much water did you use for each experiment? What’s the difference between the contents of each bottle for experiment 3? Compare the results of each experiment and discuss the difference. What have you learned to help LOVEmyBEACH? How do drains get blocked?

You don’t have to live near the sea to make a difference. Everyone can help by simply putting a bin in the bathroom for disposable products and not flushing them down the toilet.

Quick quiz: How much money have residents in the North West spent on unblocking toilets caused by flushing the wrong things down the loo?
Answer: £62million

Please think before you flush! If we all do this our seas, rivers, lakes and beaches will be cleaner. Remember: only flush the 3 Ps – pee, poo and toilet paper!

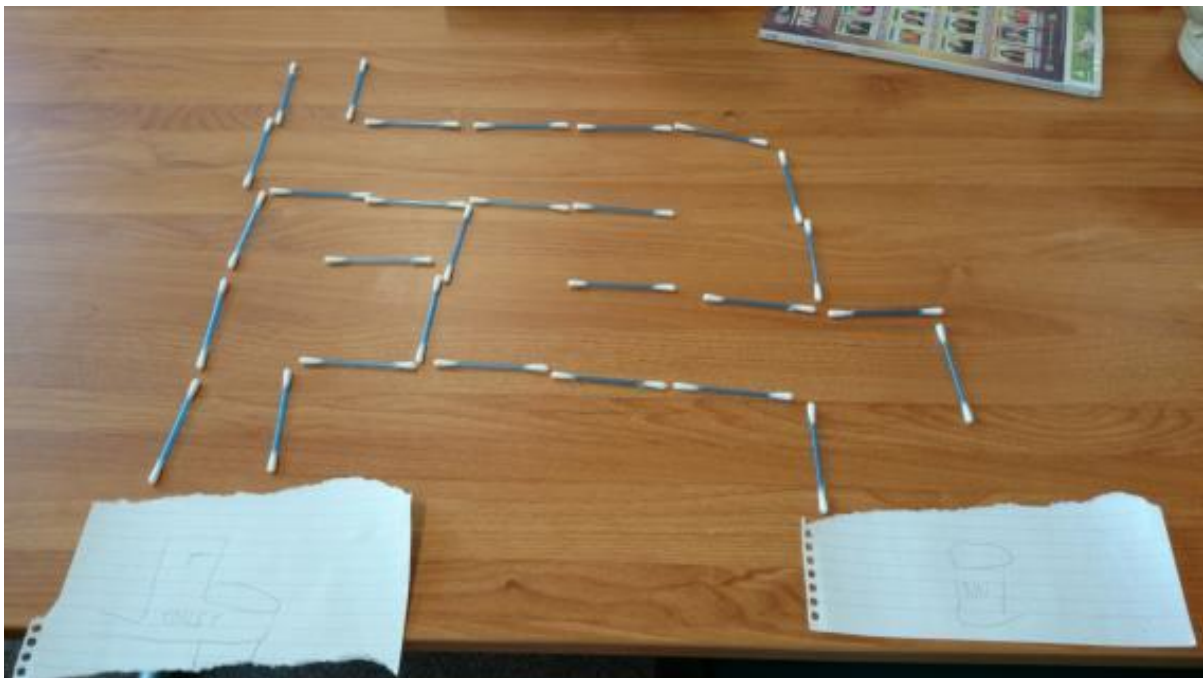
More great stuff...

<http://www.unitedutilities.com/primary-schools.aspx>

‘Can’t Flush This’ rap <http://www.youtube.com/watch?v=X-FB46km7bo>

Can't flush this!

Only the 3P's should be flushed down the toilet – pee, poo and paper. Follow the maze to see where the cotton bud should go...



Make your own cotton bud maze! Photo or drawing of a maze made from cotton buds with a printed picture of a toilet at one end and a bin at the other. Children trace a line of the correct route.

Hidden words

B E A C H A B I R O
A S H O K M S F L A
I C W T A P E E I F
G S I T O I L E T W
R H A O R P U N T A
B J U N B E A T E T
I S F B D S J P R E
N F L U S H L B E R
W N C D N E M R T R
M X P O P J K Q Z A

Poo

Beach

Flush

Litter

Water

Toilet

Pee

Sand

Bin

Pipe

Cotton bud

Paper