

BE THE WAVE AR FRIG Y DON

Stop The Block

Lesson Plan



cadwch keep
gymru'n wales
daclus tidy

**MARINE
CONSERVATION
SOCIETY**



UNDEB EWROPEAIDD
EUROPEAN UNION



Llywodraeth Cymru
Welsh Government

**Cronfeydd Strwythurol a
Buddosoddi Ewropeaidd
European Structural
and Investment Funds**



Ariennir gan
Lywodraeth Cymru
Funded by
Welsh Government



Aims
<ul style="list-style-type: none"> • Clear understanding of how sewage systems work and how they contribute to polluting our rivers and oceans • Raise awareness of issues concerning marine litter and pollution and to encourage students to act constructively to make a real difference
Objectives
<ul style="list-style-type: none"> • Explain the difference between a combined and a separate sewage system, the journey of sewage through these and the environmental impact. • Identify what should not be flushed down the toilet and the reasons why • Take action to solve these problems and change people’s behaviour • Apply knowledge of marine litter sources to everyday life through #BeTheWave actions and Eco-Schools programme

Eco-Schools topic	Global Goals
<ul style="list-style-type: none"> • Water • Litter • Waste Minimisation 	<ul style="list-style-type: none"> • 6 Clean water and sanitation • 12 - Responsible Consumption • 14 – Life Below Water

Purpose	
Ambitious, capable learners who: <ul style="list-style-type: none"> • Undertake research and critically evaluate what they find • Build a body of knowledge Ethical, informed citizens who: <ul style="list-style-type: none"> • Engage in contemporary issues, understand, and consider their actions when making choices and acting • Show their commitment to the sustainability of the planet. Enterprising, creative contributors who: <ul style="list-style-type: none"> • Connect and apply their knowledge and skills to create ideas and products 	
What Matters	Progression Step 3/4
Humanities <ul style="list-style-type: none"> • Have an understanding of own and others environmental, economic and social responsibilities in creating a sustainable future Science and Technology • Explain how the impact of our actions contribute to the changes in the environment and biodiversity. Science and Technology <ul style="list-style-type: none"> • Observe and describe ways in which materials change when they are mixed together. • Recognise that what I do, and the things I use, can have an impact on my environment and on living things 	
DCF	Progression Step 3/4
<ul style="list-style-type: none"> • Use a variety of software, tools and techniques to create a professional, individual or collaborative project outcome incorporating a range of multimedia components • Ensure my output is appropriate for specific purposes. 	



LNF	Progression Step 4
<ul style="list-style-type: none"> • Share, talk and write about my thoughts, feelings and opinions showing empathy and respect. • Present my work appropriately in digital contexts using appropriate digital conventions 	
Cynefin	
<p>All videos included are made by Welsh Water Images of the fatbergs and the environmental floods are all in Wales Panorama video features a Welsh based segment Pupils are asked to consider drains provision in their community and investigate what information is provided in their own communities</p>	

Activity 1	Resources and Equipment
<p>Sewage & Drains</p> <p>Show the Combined Sewage System graphic. Ask the class to study the image and explain what they can see/what do they think is happening. Go through and explain the graphic (use the Background Information notes if needed). Explain that until around 20 years ago, all houses in Wales have a combined sewage systems - ask them to consider what sewage system is in their house.</p> <p>Also, explain what the purpose of a storm drain is and that they go straight to the Ocean. Ask them to consider how litter impacts here.</p> <p>Got thought the various facts contributing to this problem</p> <ul style="list-style-type: none"> • Increased/heavy rainfall • Litter entering storm drains • Unsuitable items being flushed <p>Show the Separate Sewage System graphic. Again, ask the class to study the image and explain what they can see/what do they think is happening.</p> <p>Show the graphic of both Sewage Systems. Ask the class to explain which is the best system. Explain that although the Separate System solves the initial sanitary problem, there is still the huge issue of the storm drains and litter (show image of storm drain and litter). Discuss where you find storm drains – around the school, in the community, near their homes etc. You could go out and locate the drain around the school. What could be done to help prevent this? List all the ideas given. Show the class the images of the drain stencils – then ask them to design their own. These could then be used around the school grounds/community in allowed.</p>	<p>Stop the Block presentation</p> <p>Background Information notes</p> <p>NB: All images in the Stop The Block Presentation</p> <p>Card Pencils Scissors</p> <p>Chalk/spray paint (if allowed to use on drains)</p>



Activity 2 -	Resources and Equipment
<p>What we flush Watch the video 'Loo Loo's Clubs' https://youtu.be/kwi5w0Qvc9I (1:59)</p> <p>Discussion – the 3 P's (pee, poo and paper) are ok but what should not be flushed down the loo?</p> <p>Ask the class why do they think this is? What problems might other items cause?</p> <p>Show and explain the 'bathroom to beach' infographic from this h Unflushables City to Sea The things you really shouldn't flush!. Ask them what they think are the main offenders (facts in the background notes for more detail)</p> <p>Discussion – what do they think happens to unflushable items that are flushed? Do they disintegrate, remain in one piece etc?</p> <p>Experiment</p> <ul style="list-style-type: none"> • 4 clear containers with lids (e.g. large jars or bottle) half filled with water • A wet wipe • A few sheets of toilet paper • A tissue • A piece of kitchen roll <p>(You could also use other unflushables items - cotton wool, cotton bud, tampon. Or you could do the experiment with just a wet wipe and one of the other items)</p> <p>Discuss with the class which of those items they think are ok to flush and would flush/have flushed themselves. Why do they think it's ok?</p> <p>Put each of the items into a separate container with the lid on and get 4 pupils to shake them for about 30 seconds. The toilet paper will break down but the others will not.</p> <p>Ask the class - what has happened to the items in the jar? Which of the items do they now think is ok to flush and why?</p> <p>Establish that wet wipes are the worst offenders and explain the facts as to why that is (teachers notes).</p> <p>Show pupils the first fatberg picture and ask them what they think it is. Then explain what it is (teachers notes). Go through the presentation</p>	<p>Loo Loo's Club video</p> <p>Stop The Block presentation</p> <p>Computer/projector 4 clear containers with lids (e.g. large jars) half filled with water</p> <ul style="list-style-type: none"> • A wet wipe • A few sheets of toilet paper • A tissue • A piece of kitchen roll • Any other relevant (e.g. sanitary product) <p>Stop The Block presentation</p>



explaining what impact the fatbergs have, highlighted further by the environmental flood pictures. Point out that all of the pictures are from Wales – this is happening in our sewers.

Ask them to think about how this could be avoided?

Activity 3 - Stopping The Block

Look at **some** of the example campaigns to stop this issue –

Poster - citytosea.org.uk

Video - https://youtu.be/csKOddp_y8A(0:10)

Poster - [SC_bathroom_V7.jpg \(4961x3508\)](#) (seachangeproject.eu)

Poster - [Dirty-Dozen-English-2019.jpg \(2339x3308\)](#) (thinkbeforeyouflush.org)

Infographic - [TBYF-brochure.jpg \(847x595\)](#)

(thinkbeforeyouflush.org)

Website - Think Before You Flush

Think about the toilets in your school, what is done to ensure 'The Unflushables' don't get flushed?

Each pupil (or in pairs) to then plan/design a mini campaign to raise awareness in school of what should not be flushed and why. Encourage them to be as creative as possible in order to catch people's attention and to be sure what they create is suited to its purpose and audience (e.g. purpose - to raise awareness of what NOT to flush down the toilet, audience – the other pupils in their school).

Mini campaigns could involve - posters, infographics, video storyboards, logo & slogans, memes, social media posts.

Ideas to be shown and shared with the rest of the class and discuss the impact they might have.

Resources and Equipment

Computer/projector

Paper/pens

Devices for research (per pair)

Devices for filming if required.



#BeTheWave

Apply the knowledge gathered in the lesson into action as ethical and informed citizens. It is an important aspect to ensure students know they have the power to enact and make changes within their own lives and within the school. It is also a positive step which helps to balance some of the negative impacts explored within the lesson.

Decide on an action/actions to take forward either as individuals or as a class, these are some suggestions, or the class could generate their own.

School:

- Organise regular litter picks of the school grounds
- Put a campaign into action – work together and use the resources you have designed to start up the campaign in school

Individual:

- Act on what you have learnt today – be sure to only flush the 3P's. Throw all wipes, sanitary items, cotton buds and nappies away in the bin.
- Don't litter! And highlight to others that litter can end up in rivers and seas and been very harmful to the environment.
- Sign up to organised campaigns such as Unblocktober awareness campaign, Surfers Against Sewage #EndSewagePollution. Recylenow and pledge to #StopFlushingWipes with the Rivers Trust

Alternative Activities	Resources and Equipment
<p>Activity 1 Watch the panorama episode 'River Pollution Scandal' to see other ways untreated sewage is getting into our waters.</p> <p>https://www.bbc.co.uk/programmes/m000vk71</p> <p>As a class, discuss ways to tackle this specific problem (such as writing a letter to the water companies) and implement some of the ideas and actions.</p> <p>Activity 2 Watch the Welsh Water video below - Ella Explains - https://www.youtube.com/watch?v=eY80E269m9M (1:38)</p> <p>Pupils to come up with ways this could be avoided (either on the board as a class or spider diagram as pairs/individuals)</p>	<p>River Pollution video</p>



cadwch keep
gymru'n wales
daclus tidy

33-35 Heol yr Eglwys Gadeiriol, Caerdydd, CF11 9HB | 33-35 Cathedral Rd, Cardiff, CF11 9HB
029 2025 6767 keepwalestidy.cymru info@keepwalestidy.cymru

Cadwch Gymru'n Daclus yn gwmni wedi ei gyfyngu trwy warant. Rhif Cwmni: 4011164 Rhif Elusen: 1082058 Rhif TAW: 850 3958 13
Keep Wales Tidy is a Company Limited by Guarantee. Company Registration Number: 4011164 Charity Registration Number: 1082058 VAT Registration Number: 850 3958 13

