

DON'T LET IT GO TO WASTE

Lesson plan

 recycle for Scotland



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These lessons have been created alongside Recycle Week campaign assets to encourage individuals to not let their recycling go to waste.

AIM

The aim of these lessons and shortened assembly is to educate primary school pupils aged 4-12 in Scotland about recycling during Recycle Week. These lesson plans are also suitable to be used as activities at groups such as Girl Guiding and Scout Groups.

It intends to inform children of Zero Waste Scotland's relevant key messages which include:

1. Why we should recycle
2. The transformation of recycling
3. How to get the best quality of recycling including the impact of contamination

Zero Waste Scotland want to encourage everyone to give their best effort in recycling so we have a high quality of recycling.

The lesson has been designed to take approximately 50 minutes, the assembly around 25 minutes and activities around an hour each to be delivered by a class teacher, waste officer or session leader.

LEARNING OBJECTIVES

SUCCESS CRITERIA

P1-P3: To understand what recycling is with two examples of recyclable items

P4-P7: To understand what recycling is and why it's important

Complete thumbs up activity and end of lesson quiz.

Explain three benefits of recycling and participate in lesson quiz.

P1-P3: Identify items that can ruin recycling

P4-P7: Understand what contamination is and how it can impact recycling quality

Identify two things that can be done to reduce contamination (wrong item in the wrong bin). Take part in the recycling sorting activity.

P4-P7: To learn how recycling can transform into new items

Participate in the match activity in the lesson and take part in one of the additional activities.

RESOURCES

Provided in this pack:

- Lesson guide
- Don't let it go to waste recycling lesson (P1-P3)
- Don't let it go to waste recycling lesson (P4-P7)
- Don't let it go to waste assembly
- Recycling sorting activity
- Transform your recycling activities

Required in classroom:

- Computer with a large screen/projector
- Whiteboards (optional)
- Whiteboard pens (optional)
- Activity specific materials (detailed in sheets)

These lessons are designed for a specific duration. If your time is limited, you can shorten the lesson by removing pages of the PDF files using Adobe Acrobat or a free online tool such as [iLovePDF](#).

P1 - P3 LESSON

Please use the 'Don't let it go to waste' recycling lesson plan slides for P1 - P3.

TIMING	TASK	NOTES
3 minutes	Recycle Week introduced	Recycle Week introduced
2 minutes	What is recycling discussion and answer	Ask the class the question: what are their thoughts on what recycling is? Is it the same across pupils?
10 minutes	What can be recycled? Thumb up or down activity	<p>For each slide ask pupils to put a thumbs up or down. Thumbs up if the item can be recycled or thumbs down if it can't.</p> <p>For the three that can't be recycled: greasy pizza box, wet paper towel and dirty yoghurt pot, ask pupils why. Why can't it be recycled? If recycling is wet, dirty or doesn't belong in the correct bin then it can ruin all the recycling in the bin.</p>

TIMING	TASK	NOTES
5 minutes	Why is recycling important	<p>Discussion points:</p> <ul style="list-style-type: none"> • Items can be used again and again instead of having to make them brand new. You can recycle glass and metal over and over again and it will always be as good as its first use. • Reduces waste sent to landfills and incinerators, this is where general waste ends up. Explain landfill is big hole in the ground where we bury waste. • Prevents pollution. Dangerous chemicals can pollute soil and water when mining for resources. Recycling materials reduces the need for mining/cutting down trees/drilling for oil. • Protects biodiversity and wildlife. Same point as previous. • Conserves natural resources. We are reusing the materials on the planet that have already been made into items. We don't use more finite resources which links to climate change. • Reduces climate change and creates a healthier planet for us and future generations. We are using the resources we have which is better for the planet.

TIMING	TASK	NOTES
3 minutes	Journey of recycling	<p>Go through each stage of the diagram on the slide:</p> <ul style="list-style-type: none"> • Disposal – where we put our items such as plastic bottles in our recycling bin • Collection – The council will collect your recycling (if school has recycling bins, then mention this) • Sorting – The recycling is sorted at the Recycling centre. Items that don't belong are taken out. For example, plastic and metals are compressed into bales. Check your Council website as this depends on your bins. • Recycled - Once the journey is complete, items are given a new lease of life and turned into something new to be used again.

TIMING	TASK	NOTES
10 minutes	What can we do?	Watch animation of yoghurt pot. If it's not clean we can't recycle, if it is clean we can recycle. Animation of greasy pizza box. Some items we can rip it or separate it for recycling. We made something that couldn't be recycled, now able to! Plastic bottle full of juice. To recycle we need to empty the liquids inside it. To recycle better, we need to think of these steps.
2 minutes	Affect others	All the recycling in a lorry can be impacted by a few wrong items and dirty recycling. This means that what you do impacts others.
3 minutes	Recycle right	Ask the class to think about how they can recycle correctly. Then talk them through each step. Some items such as glass and aluminium can be recycled again and again and still be just as good/a high quality.
10 minutes	Quiz	Have the questions on the board and ask pupils to think and answer the questions. Can be done individually or in groups. Go over answers. How did the class do?

TIMING	TASK	NOTES
2 minutes	Finisher + end video	<p>Play Recycle Week video.</p> <p>Effort in recycling is important, we're making progress in Scotland, but we want to be even better. Remember to wash out your recycling (tins, cans, plastics), sort them in the correct bin, separating out the different elements to recycling and to check if you're doing it right, then you're putting your best effort in!</p>

P4 - P7 LESSON

Please use the 'Don't let it go to waste' recycling lesson plan slides for P4 - P7.

TIMING	TASK	NOTES
3 minutes	Recycle Week introduced, Learning Intentions & Success Criteria read out	Recycle Week is important to highlight why we recycle, the impact it has and how we can do better.
2 minutes	What is recycling discussion and answer	Ask the class the question: what are their thoughts on what recycling is? Is it the same across pupils?
2 minutes	What can be recycled?	Ask if the pupils can think of other items that can be recycled. Think of the different items at home and in school. What are the most common?

TIMING	TASK	NOTES
5 minutes	Why is recycling important?	<p>Ask pupils to write down (or talk in pairs/groups) as many reasons they can think of. Discussion points:</p> <ul style="list-style-type: none"> • Items can be used again and again instead of having to make them brand new. You can recycle glass and metal over and over again and it will always be as good as its first use. • Reduces waste sent to landfills and incinerators, this is where general waste ends up. Explain landfill is big hole in the ground where we bury waste. • Prevents pollution. Recycling also limits the pollution caused by operations when mining/logging for new materials. Dangerous chemicals can pollute soil and water. Recycling materials reduces the need for mining. • Protects biodiversity and wildlife. Same point as previous.

TIMING	TASK	NOTES
		<ul style="list-style-type: none"> • Conserves natural resources. We are reusing the materials on the planet that have already been made into items. We don't use more finite resources which links to climate change. • Saves energy. For example, recycling tin cans to create new aluminium products uses 95% less energy than creating the product from unused materials.¹ • Creates jobs. Increases the market for businesses to recycle materials and encourages new ideas on how to do that. • Reduces climate change and creates a healthier planet for us and future generations. We are using the resources we have which is better for the planet.

¹ The Aluminum Association (2021). Infinitely Recyclable. [online] www.aluminum.org. Available at: <https://www.aluminum.org/Recycling> [Accessed 19 Aug. 2024].

TIMING	TASK	NOTES
2 minutes	Discussion on sources of items	To get new materials, we need to cut down trees, mine in the land and drill for oil – all to make plastic bottles, paper and cardboard that we use everyday. This destroys habitats and can severely impact biodiversity across the world. Ask pupils if they think these operations are good to look at – point to images on slides.
2 minutes	Journey of recycling	<p>Go through each stage of the diagram on the slide.</p> <ul style="list-style-type: none"> • Disposal – where we put our items such as plastic bottles in our recycling bin • Collection – The council will collect your recycling (if school has recycling bins then mention this) • Sorting – The recycling is sorted at the Materials Recycling Facility (MRF). Contaminates are taken out (by pickers on a line) and separated out into their waste streams (plastic – paper and cardboard). Pickers don't manage to get all the wrong items so we need to do our bit. Check your Council website as this depends on your bins.

TIMING	TASK	NOTES
		<ul style="list-style-type: none"> • Reprocessing – Different waste streams have different processes. Glass is burned at high temperatures to melt it so it can be remoulded into new glass products. Paper and cardboard are washed to remove ink and turned into a slurry to make into new paper and cardboard products. • Recycled - Once the journey is complete, items are given a new lease of life and turned into something new to be used again.
5 minutes	What do I become match activity	Ask pupils to think when recycled, what some items might then become – the transformation of recycling. Answers on screen: Metal cans when recycled can become car parts, paper and cardboard into boxes, glass bottles and glass wool insulation (for homes), plastic bottle and clothes (polyester fabric). Just some examples, many items can become many things!
5 minutes	Our recycling progress	Our recycling rate is increasing and that's very positive. Average recycling rates for England and Northern Ireland are below 50% but Wales is around 66% which is second best worldwide. However...

TIMING	TASK	NOTES
		<p>In Scotland we are still finding lots of recycling in the general waste bin. Zero Waste Scotland did studies to investigate what was thrown away across Scotland, we found that over half of what we throw away could have been recycled! We still have progress to make.</p>
4 minutes	How to recycle right	<p>Steps to recycle better:</p> <ul style="list-style-type: none"> • Check the labels, lots of items have this information on the back. Some items might have different recycling instructions, for example a ready meal, you can recycle the cardboard sleeve and the plastic tray, but the plastic film needs to go in the general waste. It's always important to check. • Ask for help - your question might also help someone else. • Zero Waste Scotland has a recycling sorter which will tell you where things go – the council website will also help. Not everyone remembers all the items they can recycle at home, and sometime councils allow new items to be recycled so always a good idea to make sure you check what your bins can and can't

TIMING	TASK	NOTES
5 minutes	Contamination	Contamination is putting the wrong items in the wrong bins. This can also include recycling in the wrong bins e.g. glass in the paper recycling. Look at the examples, have the pupils seen this before? Do they do it at home? Emphasis that we need to make sure recycling is clean, sorted and in the correct bin. Show animations. If here's a few items in the wrong bin or dirty, the whole load (even if the rest is good) must be landfilled or incinerated. How you recycle affects other people.
3 minutes	Why does contamination happen?	Ask why contamination might happen. Why might someone put the wrong thing in the wrong bin, or a dirty yoghurt pot in the bin?
3 minutes	What kind of recycler are you?	Ask pupils how they recycle at home. Are they a 'Collector' (different bins in the house where recycling is being collected) 'Juggler' (someone juggling lots of recycling in their arms to take to the bin). 'Outsider' (someone taking the recycling out as soon as they're finished with it). Ask for other examples, everyone can do it differently, but it can still be correct.

TIMING	TASK	NOTES
10 minutes	Quiz	Have the questions on the board and ask pupils to think and answer the questions. Can be done individually or in groups. Go over answers. How did the class do?
2 minutes	Finisher + end video	Effort in recycling is important, we're making progress in Scotland, but we want to be even better. Remember to wash out your recycling (tins, cans, plastics), sort them in the correct bin, separating out the different elements to recycling (ready meal) and to check if you're doing it right, then you're putting your best effort in! Play Recycle Week video.

ASSEMBLY

Please use the 'Recycle Week' slides for Assembly.

TIMING	TASK	NOTES
3 minutes	Introduction to Recycle Week	It's the one week of the year people come together to achieve one goal: to encourage the public into recycling more of the right things, more often.
5 minutes	Why is recycling important?	<p>Ask pupils to talk in pairs/groups and list as many reasons they can think of. Discussion points:</p> <ul style="list-style-type: none">• Items can be used again and again instead of having to make them brand new. You can recycle glass and metal over and over again and it will always be as good as its first use.• Reduces waste sent to landfills and incinerators, this is where general waste ends up. Explain landfill is big hole in the ground where we bury waste.• Prevents pollution. Recycling also limits the pollution caused by operations when mining/logging for new materials.

TIMING	TASK	NOTES
		<ul style="list-style-type: none"> • Dangerous chemicals can pollute soil and water. Recycling materials reduces the need for mining. • Protects biodiversity and wildlife. Same point as previous. • Conserves natural resources. We are reusing the materials on the planet that have already been made into items. We don't use more finite resources which links to climate change. • Saves energy. For example, recycling tin cans to create new aluminium products uses 95% less energy than creating the product from unused materials.¹ • Creates jobs. Increases the market for businesses to recycle materials and encourages new ideas on how to do that. • Reduces climate change and creates a healthier planet for us and future generations. We are using the resources we have which is better for the planet.

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TIMING	TASK	NOTES
5 minutes	What do I become?	<p>When we recycle, we give items the chance to become something new. We're going to have a look at some examples of this:</p> <ul style="list-style-type: none"> • Aluminium can – the metal is collected, melted down and can be made into new cans or even electronics, bike parts, appliances. • Paper – washed to remove any glue/ink. It is then mixed with water to become a pulp. It's then ready to be used again. • Plastic bottles – Once it's sorted and cleaned, plastic can either be shredded into flakes or melt processed to form pellets before finally being moulded into new products.
10 minutes	Don't let your efforts go to waste	Show animations and discuss. Did pupils know that? These issues mean our recycling isn't as good quality as it could be. We want our recycling to be high quality.
2 minutes	Affecting others	If we all recycle well, but there's some that aren't, e.g. dirty/not sorted then sometimes the whole lorry load of recycling must be wasted. This means that how we recycle impacts others.

TIMING	TASK	NOTES
3 minutes	Don't let it go to waste	In Scotland, over half of what we throw away could've been recycled ² . This shows that we're still not recycling as best we can. There's huge opportunity to improve!
2 minutes	What can you do?	Highlight key actions to pupils. We must make sure to sort our recycling, check labels to see if things can be recycled, ask for help if you're unsure or use the Recycling Sorter/Council's website. Ask pupils for a thumbs up if they learned something new from the assembly and ask what they might do differently at home or in school for recycling.

² Zero Waste Scotland (2023). Household Waste Composition Analysis. [online] Zero Waste Scotland. Available at: <https://www.zerowastescotland.org.uk/resources/household-waste-composition-analysis> [Accessed 15 Aug. 2024].



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