

TOGETHER FOR A FAIR CLIMATE FUTURE

LET'S get WISE about

WASTE



interdisciplinary EDUCATIONAL
WORKSHOPS on SUSTAINABILITY
and CLIMATE CHANGE



Guidance for Teachers

Sustainability
first

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Overview

Let's get wise about waste explores why we produce waste, its impact on people and the planet and how we can avoid waste and reuse materials creatively. The workshop is comprised of presentations and art and writing activities, including making marionette shadow figures and writing stories about old clothes. Curriculum-linked presentations and activities will support pupils to consider how we can reduce waste in our daily lives and through cultural change.

The following document provides guidance on each activity and presentation including equipment needed, curriculum links and main concepts covered.

We recommend watching the presentations and completing the activities in the suggested order below. Please feel free to also pick and choose which activities you would like to do and which presentations you would like to watch.

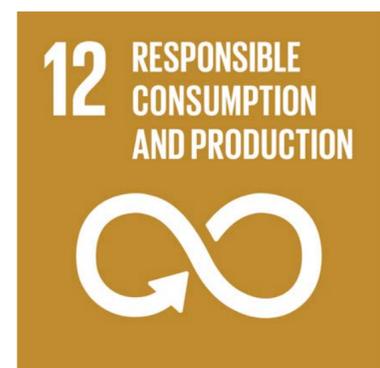
We will be holding a pupils' assembly on June 15th, 1pm-2pm to celebrate and share pupils' art and writing. The assembly will also feature a panel of experts and leaders, considering how to take forward the ideas of pupils. If you and your pupils would like to attend and share art, writing and/or climate pledges, please email Sonya Peres at sonya.peres@sustainabilityfirst.org.uk or register [here](#).

Age range: 8-11

Sustainability *first*

The United Nations Global Goals for Sustainable Development were developed in 2013 to provide an agenda for the future of sustainability. The Goals are used across member states and sectors to assess and understand progress and have developed into a common language to discuss sustainability. Many teachers across the globe use the SDGs to embed sustainability within education.

The following workshop series supports the realisation of various Global Goals, including:



Presentations and Activities

Presentation 1: Let's get wise about waste

Activity 1: Turning waste into art

Activity 2: Intergenerational letter writing activity

Presentation 2: Exploring clothing Waste

Activity 3: Storytelling activity

Resources

Let's get wise about waste!

Sustainability
first

Equipment:

- Device to share video
- Pencils, paper and/or computers for pupils' to write questions, comments, concerns etc.

Main concepts:

- What is waste?
- Why do we produce waste?
- What are the impacts of waste on people and the planet?
- How can we use creativity and care to produce less waste?

Curriculum Linking:

England

- **Key Stage 2 Science:** Pupils should be taught to recognise that environments can change and that this can sometimes pose dangers to living things.

Scotland:

- **Social Studies:** I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally responsible way. SOC 2-08a
- **Health and Wellbeing:** I can understand how advertising and the media are used to influence consumers. HWB 2-37a

Wales

- **Geography:** Pupils should be given opportunities to describe the causes and consequences of how places and environments change, e.g. by season; from past to present; the need for sustainability.
- **Science:** Pupils should use and develop their skills, knowledge and understanding by comparing the Earth with other planets, investigating materials around them and considering the importance of recycling.



Step by Step Guidance:

- Watch the video with pupils
- Afterward, encourage pupils in groups, or as a class, to consider what kind of waste they produce in their daily lives.
- Do they produce food, plastic, clothing or electronic waste? Why?
- Are pupils' concerned by this?
- Submit questions, comments and/or concerns in the uploader form here.



Share with us
so we can
learn with you!

Make sure to upload your work [here](#) so we can learn with you and share your work widely with waste experts at our June 15th pupils' assembly!

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Let's get wise about waste transcription

Did you know that the average household in the UK produces more than a tonne of waste every year? This comes to a total of 31 million tonnes per year. What does that look like? Well, that's the weight of three and a half million double-decker buses, a queue of which would go around planet earth two and a half times. Imagine that!

But what exactly is this waste that we are producing?

Well, in this case, waste is anything that we get rid of, or put in the rubbish or recycling bin. While we try to recycle 45% of the waste we produce at home in the UK, most waste gets burnt or ends up in landfills, which are areas where waste is dumped. Too much waste is bad for the environment and for people – but we'll get to that later!

Can you think of something you might throw away?

We may throw away newspapers, or plastic bottles. Or perhaps tinned cans, leftover food, cuttings and weeds from the garden, old tea towels or pillows. We even throw away batteries and computers! Let's explore different kinds of waste!

The waste we produce includes food waste – so think of that loaf of bread that got mouldy in the bread bin which had to be thrown away, or those bananas that got too brown and mushy, or even our leftovers that we didn't want to eat any more. In the UK, we produced 9.5 million tonnes of food waste in 2018... that's more than the weight of 2 million elephants! I don't know about you, but it's hard for me to imagine that many elephants, but that's how much food waste we produce in just one year! Here's another way to think about food waste – all together, homes in the UK waste 3.1 million glasses of milk every year (Wrap UK). That's over 9,600 swimming pools filled with milk!

Waste can also be plastic, so when we buy milk or a bag of spaghetti from the shop and throw away the container, or plastic wrapping. We dispose of so much plastic, you can find plastic waste anywhere in the world – we've even seen plastic embedded into ice in the Arctic!

What about the jumper, or the shirt you're wearing right now? Have you ever thought of that as waste? Well, in the UK, an estimated 350 000 tonnes of clothing go into landfills each year! We'll explore this type of waste together soon.

And there's also electronic waste which includes televisions, computers, and video game consoles that we dispose of. What happens to them when they break or when we get newer, upgraded versions? Well, often, they go into landfills.

People produce a lot of waste! Too much waste in fact. And unfortunately, it's hurting our planet.

Our planet is going through a difficult time because of human activities. Activities that people do a lot, like driving cars, flying in airplanes and making large amounts of clothes, cars, electronics and other things in factories, release greenhouse gases into the atmosphere. These greenhouse gases include carbon dioxide, methane and nitrous oxide. Too much greenhouse gas traps too much heat in our atmosphere and causes all sorts of problems as our planet gets warmer.

But what does this have to do with waste?

When waste is sent to a landfill, or is burnt, it releases greenhouse gases as it slowly decomposes, or breaks down. Additionally, as waste sits in landfills, it pollutes our soil and water systems as time passes. This is bad for human health! Electronic waste, for example, is considered dangerous because it contains poisonous substances that affect human health, like mercury (you know, the silver liquid in thermometers) and lead – that's why we have to be careful when we get rid of computers and televisions!

But waste isn't just bad for human health, it is also bad for animals. 12 million tonnes of plastic finds its way into the ocean every year – that's the weight of 120,000 small blue whales! Approximately 5,000 items of plastic pollution have been found every 1 mile on UK beaches. Have you ever heard of the Great Pacific Garbage Patch? The Great Pacific Garbage Patch is a massive, and I'm talking massive, patch of waste in the Pacific Ocean. There are an estimated 1.6 trillion pieces of plastic in the Great Pacific Garbage Patch – many pieces are microplastics, or tiny pieces of plastic that are sometimes hard to even see. One scientist, Dr. Penelope Lindeque, described the ocean as "a soup of microplastics."

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Let's get wise about waste transcription continued

This tremendous amount of plastic pollution has been hurting fish and other marine life. Many pieces of plastic in the ocean are micropastics- ortiny pieces of plastic that are sometimes hard to even see. Microplastics are so small, they are often invisible. This makes it easy for sea life to accidentally eat. A group of researchers in the UK found microplastics in every single marine mammal they surveyed – includingdolphins and grey seals. According to Plastic Oceans, 100% of sea turtles are known to eat plastic.

Making plastic and electronic things, as well producing clothes and foods, releases carbon dioxide and uses up lots of natural resources from our earth, like minerals from deep underground, water from our oceans, rivers and lakes, and fossil fuels, like oil and gas. When we waste food or plastic, we are, in a way, wasting all the resources it took to produce our burger, or the packaging of our spaghetti, as well as all the gasses released. Food waste accounts for 8% of all our greenhouse emissions across the world! Think back to those glasses of milk, producing 3.1 million glasses of milk uses 360 billion litres of water ... that's 12 million swimming pools of water wasted when we throw away milk (Wrap UK).

Aside from the planet, waste also has an impact on our society. The European Union, the UK and countries like the United States have given lots of their plastic waste to other, often poorer countries to recycle. These countries have accepted this plastic waste because they get money to do so, but often the waste they receive cannot be recycled, so instead it gets burnt or stays in landfills – this impacts the health of people living in those countries due to pollution! This means some people are creating lots of plastic waste that will impact the health of those who aren't responsible for the waste – that doesn't seem fair to me.

All this waste also affects society in another way. Can you guess what that is?

If we see everything we buy as something that can be thrown away, or something that will eventually become rubbish, then we'll buy more! Which can be expensive and impact people and the planet. Constantly buying new things instead of learning how to reuse or repair our stuff can also make us less creative!

So, what do I mean by this?

For example, if we tear a hole in a shirt, we might see it as something that can be thrown away, but we could use our creativity to learn how to sew up the hole, or make a nice little patch to cover over it.

We could see a plastic bottle as something to be thrown away, or we could use our creativity to think about how else to use it – to personalise it to use as a piggy bank or to use it to grow plants, or feed birds.

It's important to produce less waste, as this will help the planet and people!

So, how can we produce less waste?

Well, we can follow this simple idea:

Have you heard of "reduce, reuse and recycle?" – While reduce, reuse and recycle is great, we can add more actions to ensure we're being as wise about waste as possible!

To avoid waste, let's always try and first:

Reduce – this means lowering the amount of waste we produce. How can we do this? We can start by trying not to buy or use things that we think we may throw away, like plastic bags – we can instead use cloth bags. In fact, many people across the world challenge themselves to going plastic free to reduce plastic waste! Does this sound scary? It doesn't have to be! Organisations like Friends of the Earth encourage us to try going plastic free for a week, or even just a day here and there. There are many ways to do this, from making juice at home instead of buying it in plastic bottles or using our own containers when we are collecting a takeaway.

Even when buying or cooking food, ask your parents or carers not to buy or cook food that you don't think will be finished. We can also try to buy things only when we need them – like new clothes or new stationary for school.

If we can't avoid buying something, then we should try and: reuse, repurpose, repair and donate!

Reuse – this means not throwing away things after using them, so the plastic bag you got at the shop, try and use it many times! Repurpose – this means reusing something but changing it slightly so that it can help you in a different way, or serve a different person! Why not take something you would have thrown away, and turn it into something new! For example, you might turn a ripped pair of jeans into shorts! Even for food waste, we can help our families use leftovers to create new dishes, like with leftover rice, we can make fried rice, or pakoras, and in this way, we are using food that may have become waste and creating a new dish with it!

Let's get wise about waste transcription continued

Repair – We can also repair items instead of throwing them away and turning them into waste. Do your trousers have a hole in them? Why not ask a trusted adult to help you sew it back up? Is your computer broken? Why don't you ask a family member to help you repair it?

And, we can always donate our unwanted things if they are still working and useable.

Donate – Don't want something anymore? Why not give it to other people who may be able to use it, at a charity shop? And lastly, if we can't do all of this, we should try and recycle. Recycling is the last thing we should do to tackle waste for a few reasons. One is because local councils often burn items we want to recycle – so even if we think all our waste will be recycled, that often isn't the case! Another reason why recycling isn't the best option to reduce waste is that it takes resources and energy to recycle items. But, it's still better to try and recycle things rather than have them go into a landfill! So if you cannot reduce, reuse, repurpose, repair or donate, then definitely still try to recycle!

It may feel overwhelming to change our habits, or ask people around us and our loved ones to change theirs, but if we can try and re-imagine items not as waste, but as valuable items that we can creatively remake into something useful or interesting, or reuse, repair or donate, then slowly, we can become wise about waste!

Equipment:

- Cardboard or plastic (recycled)
- Pen, pencil and eraser
- Scissors
- String or wire
- Needle or pin
- Paper fasteners
- Masking tape
- Stick or bamboo skewer
- Old coins
- A torch
- Device to play the video



Main concepts:

- How to use waste materials creatively
- Making a shadow marionette figure using waste cardboard
- Telling a story about climate change, working collaboratively in small groups to perform a shadow marionette show

Curriculum Linking:

- England

Art and Design: Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

- Scotland

Expressive Arts: I can create and present work that shows developing skill in using the visual elements and concepts.

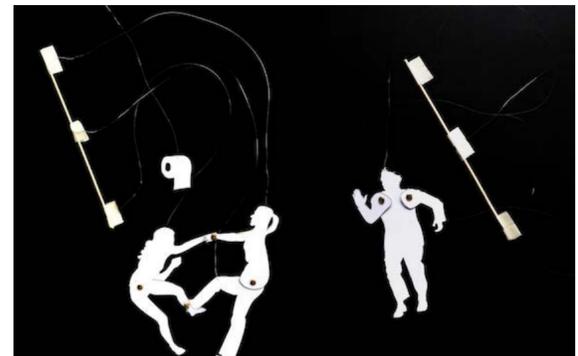
Expressive Arts: I have the opportunity to choose and explore an extended range of media and technologies to create images and objects, comparing and combining them for specific tasks. EXA 2-02a

- Wales

Art and Design: Pupils should be given opportunities to 1. describe and make comparisons:
• between their own work and that of others 2. experiment with and examine the methods used by other artists, craftworkers and designers from different: • periods • places • cultures and to investigate the natural and made environment using a variety of materials.

Step by Step (continued)

- Imagine a character you would like to make – this could be person, animal, object or something from your imagination.
- Draw your character on the cardboard. You can use photographs as reference. You will need to simplify the figure, focusing on its outline. Think about your shadow. You will need to draw any moving parts like arms or legs separately.
- Cut out your character with scissors.
- Add paper fasteners at the joints (such as arms or legs) for movement. Decide the points where you want to tie your strings. Make holes, and add string or wire.
- Attach the string or wire to a stick or bamboo skewer. It is best to do this with masking tape so you can easily adjust it. You could alternatively tie a knot. You could also add sticks from the bottom rather than strings from the top.
- You may need to add a weight to the cardboard so that it stays the right way up. You can do this by taping an old coin to the back of the character.
- To perform you can shine a torch behind the cardboard character, so that its shadow appears on the wall.
- To create a story, work in a small group (3-4 pupils). You will each introduce your character with their name and a description. You will create a 5 minute story together which includes all of the characters.
- You can introduce the characters, increase the action or conflict, to a climax, then resolve the conflict and show what might happen to the characters in future.
- Rehearse the performance, including who will hold the puppets and torch, can you make any sound effects? Share your performances with your classmates.



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Intergenerational Letter Writing Activity

Equipment:

- Pencils, paper and/or computers for pupils' to write



Main concepts:

- Exploring different perspectives on waste
- Comparing your own lifestyle and experiences with others
- Using creativity and imagination to value clothing

Curriculum Linking:

England

- **Key Stage 2 Geography:** describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Scotland

- **Social Studies:** I can compare and contrast a society in the past with my own and contribute to a discussion of the similarities and differences. SOC 2-04a
- **Literacy:** I can use my notes and other types of writing to help me understand information and ideas, explore problems, make decisions, generate and develop ideas or create new text. LIT 2- 25a.

Wales

- **Geography:** Pupils should be given opportunities to describe the causes and consequences of how places and environments change, e.g., by season; from past to present; the need for sustainability
- **Geography:** Pupils should be given opportunities to identify differences between ways of life at different times
- **English:** Learners are able to write a comprehensive account of a topic or theme.

Step by Step Guidance:

- Download the PDF with statements and letters from older individuals
- In groups or individually, ask pupils to read through the letters and statements
- In groups or individually, ask pupils to respond to a letters or statement of their choice by answering:

- **What was the most interesting part of the letter? Why?**
- **What part of the letter surprised you? Why?**
- **How are you different to the person writing the letter? How are you the same?**

- Please feel free to submit pupils' responses in the uploader form here. We will share pupils' responses with older people who submitted their letters and statements.



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Learning about Clothing Waste

Equipment:

- Device to share video
- Pencils, paper and/ or computers for pupils' to write questions, comments, concerns etc.

Main concepts:

- What is clothing waste?
- Why do we produce waste?
- What are the impacts of clothing waste on people and the planet?
- How can we use creativity and care to produce less clothing waste?



Curriculum Linking:

England

- **Key Stage 2 Science:** Pupils should be taught to recognise that environments can change and that this can sometimes pose dangers to living things.

Scotland:

- **Social Studies:** I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally responsible way. SOC 2-08a
- **Health and Wellbeing:** I can understand how advertising and the media are used to influence consumers. HWB 2-37a

Wales

- **Geography:** Pupils should be given opportunities to describe the causes and consequences of how places and environments change, e.g., by season; from past to present; the need for sustainability.
- **Science:** Pupils should use and develop their skills, knowledge and understanding by comparing the Earth with other planets, investigating materials around them and considering the importance of recycling.

Step by Step Guidance:

- Watch the video and encourage pupils in groups, or as a class, to consider whether they produce clothing waste, or contribute to fast fashion
- Submit questions, comments and/or concerns in the uploader form here.



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Learning about clothing waste transcription

Now, I want to talk about a type of waste that we might not think of as waste. Think about what you're wearing – your jumper, your trousers... what will happen to these items of clothing when you outgrow them, or no longer want them?

In the UK, we buy a lot of clothes. According to WRAP, in one year, 1, 245,000 tonnes of clothing are purchased, which is around 17 kg of clothing per person! Again, what will happen to all these items of clothing when we no longer use them?

Well, in the UK, most of these items end up in a landfill – £140 million worth of clothing (The Guardian)! And, depending on the material they are made out of, they could sit in a landfill for around 200 years before they disintegrate (EPA). 200 years! Can you imagine what the world will be like 200 years from now? My jumper may still be around then!

The way we buy clothing has been changing in the past few decades. We buy so many clothes, and trends change so quickly, the clothing industry now makes lots and lots of cheap clothes very quickly – we call this Fast Fashion. But what happens when we throw our clothes away to buy new ones? Like all waste, this impacts both the planet and society.

In order to make clothes quickly and cheaply, companies need to use cheap materials and, often, these materials aren't great for the environment. For example, synthetic fabrics, which over 63% of clothes are made out of, are cheap, but they use fossil fuels, like oil and gas in their production and they stay in landfills for over 200 years!

Other materials like leather and cotton use a lot of our natural resources, like water. Making leather and cotton also takes up a lot of land that can be used to grow food or can be and homes for wildlife! Because of this, when we use clothes for a short while and then throw them away, and then buy new clothes, we're using a lot of resources which has an impact on the environment.

Fast Fashion also impacts people. In order to sell clothes quickly and cheaply, companies often pay the people who make our clothes very little. In India and Bangladesh, where many of the clothes people in the UK wear are made, workers in clothing factories are paid much lower than what they need to live comfortably, while clothing brands make lots more money.

The way to take action against Fast Fashion and clothing waste is to value and love our clothes more and to value the people who have made our clothes as well, so that we want to take care of our clothes, for example by sewing up holes and sewing on buttons that have fallen off, so that we can wear our clothes for longer. Also, if we value our clothes and the people who make them, after a while, if we don't want to use certain items of clothing, we can donate our clothes to people who may need them, or give them to younger siblings or cousins, instead of throwing them away! I'm sure most of you do this already! Zero Waste Scotland recommends recycling clothes at textile banks – these are specific drop off bins you can find near supermarkets or local carparks. Textile banks and charity shops take your clean, unwanted clothes, socks and shoes and properly recycle the material.

Another way to take action against Fast Fashion and clothing waste is to get creative! Do you want a new jumper? Why not learn to knit one! Knitting a sweater means that you can make sure your yarn is made in a way that doesn't harm the environment. When you knit your own sweater, your sweater doesn't have to travel hundreds or thousands of miles in a truck or plane, which release greenhouse gases, to get to you – because you've made it right in your own home! It's also so fun to get to wear one of your own creations and show the world your brilliant work. If we think back to our previous conversation about how we can minimise waste, we discussed repurposing things. We can take old clothes and turn them into new things: for example, we can make a bathmat with old t-shirts, or tea towels with linen shirts. I don't know about you, but these sound like excellent Christmas presents to me!

Like with all waste, it may be overwhelming to think about changing our habits and daily lives so that we produce less clothing waste. But if we slowly start to see clothes as valuable things that can keep us warm and help us show the world our creativity and unique personality, instead of something we wear for a short while and then throw away, then that's an excellent step to reducing clothing waste.

Equipment:

- Pencils
- Paper

Main concepts:

- Sustainable fashion
- How to reuse, repair and recycle clothing and textiles
- Using writing and creativity to value clothing
- Developing storylines and characters to bring our clothes to life to value them more

Curriculum Linking:

England

- **Writing** – Pupils should be taught to plan their writing by considering how authors have developed characters and settings in what pupils have read, listened to or seen performed. Draft and write by describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action.

Scotland

- **Literacy**: I can use my notes and other types of writing to help me understand information and ideas, explore problems, make decisions, generate and develop ideas or create new text. LIT 2- 25a.

Wales

- **English**: Learners are able to write a comprehensive account of a topic or theme.



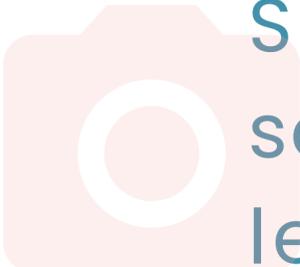
Step by Step:

- Play the video from Village Storytelling Centre, feel free to introduce Lauren, the storyteller:

"Ever since I can remember I've always loved to entertain people, to sing, act, make people laugh and share stories. When I left school I went to drama school to really learn how to perform, but also, how to work with groups of children and adults to teach and inspire creativity. It wasn't until I was in my first job working in a theatre that I discovered that you could actually work as a storyteller! I went to a performance of storytelling in Dundee one evening and realised that stories not only have the power to entertain, but also to change lives and to change the world! And so, I became a storyteller to make a difference...and the rest is history!"

- The video will begin with a 10 minute story followed by a short interactive activity asking pupils' about their experiences with clothes and sharing clothes.
- Lauren, the storyteller, will then set out a writing task for pupils:
- Think about your favourite item of clothing and create a life for it:
- Who has the item of clothing before you? What did they do with? What kind of life did they lead?
- Remember to share your stories through the uploader here so we can share and celebrate them at our pupils' assembly on June 15th!



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Sources used in Workshop Presentations

[Clothing Waste - WRAP](#)

[Resources on clothing waste and reuse- TR Aid](#)

[Food Waste - WRAP](#)

[Resources on Plastic Waste - Plastic Oceans](#)

[Exporting Plastic - The Guardian](#)

[Plastic Free Friday - Friends of the Earth](#)

[Fast Fashion and Landfills - Groundsure](#)

[Great Pacific Garbage Patch - National Geographic](#)

[20 Facts About Waste and Recycling - CB Environmental Group](#)

Other Resources

[All about the circular economy- National Geographic Kids](#)

[Save Evie's Whale Campaign - National Grid](#)

[Plastic Pollution Resources - City to Sea](#)