

Topic based resource

# Waste Minimisation

Lower Key Stage 2





## Background information

Wales aim to be a Zero Waste Nation, by 2050. Disposing of waste in landfill sites produces harmful gases such as the greenhouse gas, methane, which contributes to global warming. Resources are being wasted rather than reused or recycled and space in landfill sites is running out.

Wales is a global leader for recycling household waste, we are currently third best in the world. A target has been set by the Welsh Government to recycle 70 percent of the waste in Wales by 2025. Recycling prevents rubbish being sent to landfill, saving millions of tonnes of carbon emissions a year. New technologies are being used to recover the energy from waste to provide heat and electricity. The next steps to achieving a zero waste status include creating a circular economy where resources are used for as long as possible, repaired or re-purposed before being recycled and to be recycling 100% with no waste.



## Climate perspective

In 2015 the United Nations agreed on 17 Sustainable Development Goals for 2015-2030 to tackle current global challenges, these include sustainable habitats and energy. Sustainable living, waste management and responsible consumption are ways we can all work towards reducing carbon emissions and slowing down global warming as well as improving our local surroundings. When we take steps to improve the social, economic, cultural, and environmental wellbeing of Wales we must also take into account the effects our decisions and actions may have for the rest of the world.

Considering the energy and resources needed to meet all our daily needs including food, water, fuel, clothing, and shelter can play an important part in reducing waste. As we take responsibility for our consumption and habits, the choices we make and our individual actions may seem small in the face of the global challenge of climate change, but when we all take positive action, the small things will add up to make a big difference.

# 'What a Waste' Game

## Lower Key Stage 2

### Reduce, Re-use, Recycle?

For Wales to become a Zero Waste Nation by 2050 we all need to do our bit to reduce waste by making responsible decisions about what we use and how we dispose of things. This game will help children to stop and think about what should happen to the things they no longer use or require.

### Materials needed:

- A wide range of household items children can relate to which are no longer required, or pictures if items unavailable - e.g. single use plastics, cardboard boxes, plastic packaging, magazines/catalogues, batteries, food waste, old clothes and shoes – wearable, but unsuitable and damaged/worn out, old electrical items, obsolete mobile phone, CDs/DVDs, toys, books, games, furniture, fast food packaging etc. Ensure all items are clean and safe – free from sharp edges and residues.
- Boxes or 'black' bin bags for each team
- Bins, containers or hoops with signs for 'waste' to be sorted into - landfill, food waste, garden compost bin, recycling, charity shop, give away, re-purpose, repair.



### Step 1

Mark out a track on the playground or grass. Place the labelled recycling bins/boxes or hoops the other end of the track to create the 'recycling centre', making sure the children understand what each receptacle is for. Divide the children into teams. Explain that each team has a black bag of the same number of items/pictures that are going to end up in landfill unless they work together to help to sort them out and work out a better way to dispose of them.

## Step 2

Each member of the team takes it in turn to pick an item from the bag and discuss which bin they think it should end up in. Encourage the children to take time to think about their options rather than just race to get rid of their rubbish as fast as they can as this is an obstacle to recycling in real life – people think they do not have time to sort their waste!



## Step 3



Once the decision is made the child who picked the item runs to the recycling centre to sort their waste item into the chosen bin/container, then returns to their team to hand over to the next child. Continue to sort the items in the black bag until each child has had chance to take part and the black bag is empty.

## Step 4





Gather the children around the bins/containers/hoops to look at where the waste has ended up. Look through each receptacle together and ask the children to vote with thumbs up/down for if they think the item is in the correct/incorrect place, with thumbs in the middle as an option for unsure. Discuss each item to ensure that children gain a clear understanding of why each item has ended up where it has and address any misconceptions.

Talk about items you would not put in the game which could be dangerous for the children to touch such as dog poo bags, broken glass, chemicals - you may also wish to include safety issues around drug paraphernalia in your discussion if it is something the children are potentially exposed to.

Discuss the idea of a circular economy – instead of unwanted items travelling in a straight line from the user to landfill, that they can travel around a circle as they go from the user to be re-used by someone else, repaired, re-purposed and recycled to extend the life of the resources and energy taken to make them in the first place.

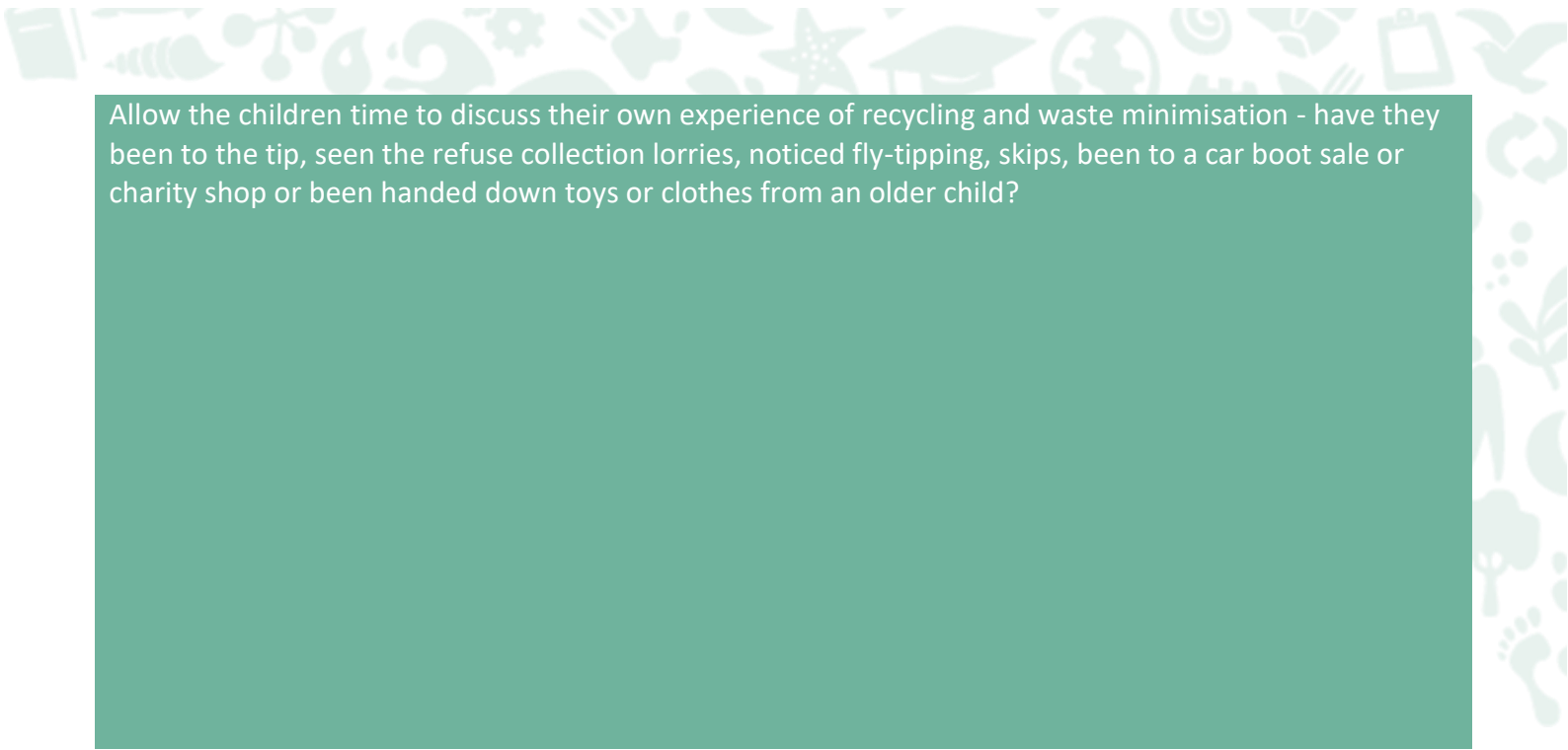
## Step 5

Ask children to discuss and share ideas of how they could help friends, family, school community and wider community to improve their waste minimisation and management. Could you include any of these ideas to meet your Eco Schools targets or tick them off on your review?

### Challenge

Can the children design and make their own outdoor game (e.g. milk bottle skittles with numbers on to practice number skills) or decoration (e.g. kitchen utensil wind chime) using recycled/repurposed materials?

## Follow up discussion



Allow the children time to discuss their own experience of recycling and waste minimisation - have they been to the tip, seen the refuse collection lorries, noticed fly-tipping, skips, been to a car boot sale or charity shop or been handed down toys or clothes from an older child?

# Curriculum Links

## Areas of Learning and Experience - Humanities

### Statement of what matters:

Our natural world is diverse and dynamic, influenced by processes and human actions

Informed, self-aware citizens engage with the challenges and opportunities that face humanity, and are able to take considered and ethical action

## Areas of Learning and Experience - Health and Wellbeing

### Statement of what matters:

Developing physical health and well-being has lifelong benefits

Our decision-making impacts on the quality of our lives and the lives of others

# Next steps and other ideas

- Set up a repair shop or tinkering area in your outdoor area
- Hold a 'repurpose' challenge – can children make a craft item from recycled materials or invent a new way to help with reducing waste in the school or community
- Introduce community recycling facilities in your school grounds for hard to recycle items such as batteries or computer printer cartridges
- Invite your local authority Waste Minimisation Officer to talk to your school community
- Look at how you are already 'reducing, reusing and recycling' can you introduce a culture of repurpose and repair to your school or local community?
- Research and share ideas for ways to make packed lunches zero waste
- Organise a used school uniform sale to raise money for the school or charity

### Useful websites

<https://walesrecycles.org.uk>

<https://wrap.org.uk>

<https://gov.wales/circular-economy-strategy>

<https://myrecyclingwales.org.uk>



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