

## The Butterfly Effect

# Waste

Age	Activity Summary	Resources
5-6	Re-use drama game.	Ordinary items, potentially including; a cardboard box, a pole or stick, a bowl etc.
6-7	Exploring when common items become 'waste'.	A piece of paper, a water bottle etc to demonstrate.
7-8	Exploring the lifespan of objects.	Break it Down Activity Sheet
8-9	Reduce, Reuse, Repair, Recycle, Rot, Dispose pyramid.	Reduce, Reuse, Repair, Recycle, Rot, Dispose Pyramid Powerpoint. Post-its and pencils.
9-10	Reducing packaging.	Computer for research and letter writing and/or pens, pencils and recycled paper
10-11	'Waste' fashion show.	Items that would otherwise be thrown away, sellotape, glue, paper clips, staples and stapler. Recycled paper and pens/pencils to sketch designs.
11-12	School strategies to reduce waste.	Pens, pencils and recycled paper or computers for planning. Unwanted items to swap/sell.

Teachers Notes:



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11-12

## We are learning...

that the things we use in our lives can have other uses too and other people can see things we think of as 'waste' as something else.

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## We can now...

demonstrate that we can use objects in many different ways by acting out some of these.



## Activity

Discuss with the class that something is only 'waste' if no one has a use for it anymore. Bring in a cardboard box, a long pole, a bowl and/or other household items. Play a drama game where the pupils sit in a circle and each child has to act out a new use for the item. For example, the box could become a toy ship, the pole could become a walking stick for an elderly person, a bowl could become a hat etc.

## Digital / At Home Version

Complete the task in the same way using household items and family members or classmates online.

## Additional Challenge

Add words/dialogue to your scene.

## Additional Support

The children could work in pairs or groups to think of, and act out a new use for each item.

## Resources

Ordinary items, potentially including; a cardboard box, a pole or stick, a bowl etc

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## Suggested Follow-On Activities

Draw a picture of your favourite new use for each item.

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## UN Sustainable Development Goals

[Goal 11: Sustainable cities and communities](#)  
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## We are learning...

at what point things become 'waste' and how to stop this from happening.

## We can now...

explain some of the ways we can stop things being thrown away that don't need to be.

## Activity

At what point in the life of a piece of paper does it become 'waste'. Starting at the front door of the school walk the class through 'the life' of a piece of paper once it enters the school building. Where does it go? How is it used? What happens when it is finished being used? Is there any way it could be re-used again? Complete the same activity for a water bottle, a pen etc.

## Digital / At Home Version

Complete the task in the same way using household items.

## Resources

A piece of paper, a water bottle etc to demonstrate.

## Suggested Follow-On Activities

Draw a comic strip showing 'The Life of a Piece of Paper'

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## Additional Challenge

Research where each item came from before it arrived at the school.

## Additional Support

Pair the children up or work in groups during the activity.



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## We are learning...

that different items that we throw away take different amounts of time to break down and disappear.

## We can now...

discuss how long it takes different items to decompose.



## Activity

Ask the class if they can tell you where they put their rubbish when they are finished with it. What happens to the rubbish after that? Where does it go? Did you know that most of the things we throw away end up on a landfill site and that some of the things we throw away can take a very long time to break down. Sometimes, as they break down into the soil they release harmful chemicals that are damaging to people and wildlife. Complete the Break it Down Activity Sheet either using digital devices or on the board.

## Digital / At Home Version

Complete the activity in the same way but copy and paste the answers into the correct boxes on the worksheet.

## Additional Challenge

Can the pupils research how long it takes other things to decompose?

## Additional Support

Appropriate peer support.

## Resources

Break it Down Activity Sheet



## Suggested Follow-On Activities

Redesign the outside of a rubbish truck to make it unappealing to use. For example, could it be a horrible colour, or show an image of an overflowing rubbish dump etc?

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## We are learning...

a system that can help us think about how to prevent waste.

## We can now...

identify some ways to prevent waste.



## Activity

Explain to the class that everything they throw away should be thought about and considered in terms of Reduce, Reuse, Repair, Recycle, Rot, Dispose. Show the class the PowerPoint slide containing the pyramid. Do the class know what each word means? Ask the class to work in groups to list items they have thrown away in the last day. Using the combined list, write these items on post-its and place onto the pyramid on the board to suggest an alternative thing to do with the item once you're finished with it.

## Digital / At Home Version

Complete the activity in the same way but copy and paste your words onto the pyramid digitally.

## Additional Challenge

Put this into action over the next few days and explain to the class if/how it changed your behaviour around waste.

## Additional Support

Provide pupils with a list of items to use rather than ask them to think of their own.

## Resources

Reduce, Reuse, Repair, Recycle, Rot, Dispose Pyramid PowerPoint. Post-its and pencils.



## Suggested Follow-On Activities

Recycle Wars - Which class in the school can recycle the most in a one-week period? Can the pupils create a graphic, like the recycle graphic, that includes all the words in it. Where should this graphic be displayed to encourage behaviour change? On bins? On packaging etc?

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## We are learning...

that waste often comes in the form of packaging. Waste can be reduced if packaging is redesigned.

## We can now...

give examples of items that are packaged in a wasteful way and suggest alternative ways to package these items.



## Activity

Look on a website for a local online food retailer. Can they class identify any items of food or other products that use excess packaging? Can this extra packaging always be recycled? These might include fruit and vegetables, toys etc. Write a letter or class email to the local supermarket suggesting ways to cut down on their use of packaging and explain why this is important.

## Digital / At Home Version

Complete the activity in the same way using email.

## Additional Challenge

Write individual letters to different supermarkets and compare any responses received.

## Additional Support

Write the email as a whole class group rather than individually.

## Resources

Computer for research and letter writing and/or pens, pencils and recycled paper.

## Suggested Follow-On Activities

Investigate the waste that comes from the packaging we don't see; the plastic around deliveries to supermarkets etc. How can this be reduced? Can you start a campaign to highlight this hidden plastic?

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## We are learning...

ways to upcycle objects creatively.

## We can now...

create a creative item of clothing using items that would otherwise be wasted.



## Activity

Ask each pupil to bring in 1 item from home that is going to be thrown away. Perform an online search for the term 'World of Wearable Art' and discuss the images that come up. Work in groups to create a costume based on one of the themes that we look at during this project (water, plastic, jobs etc) using the objects that have been brought in, as well as other items from around the school that were in the recycle bins. Hold a fashion show to showcase the Designs and share online using the hashtag #STEAMatJacobs.

## Digital / At Home Version

Complete the activity individually in the home, using household items.

## Additional Challenge

Specify rules around the size, height etc of the costume that allow the use of measuring skills as part of the design process.

## Additional Support

This work can be completed in groups.

## Resources

Items that would otherwise be thrown away, Sellotape, glue, paper clips, staples and stapler. Recycled paper and pens/pencils to sketch designs. .

## Suggested Follow-On Activities

Buy nothing new challenge - try to go a week/month without buying anything new - only upcycled etc.

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## We are learning...

about how to find new homes for old things to prevent waste.

## We can now...

create a real-life solution to the problem of waste.



## Activity

Organise a school-wide swap fair for clothes, shoes and books that are no longer worn. You'll need to set a date, time and rules for attendees. What items will you accept? How are you going to encourage people to take part? Are you going to charge people for items, or can they simply swap one thing for another? If you are charging for items, what will you do with the money they will promote sustainability?

## Digital / At Home Version

Run a digital version of this event on the school website.

## Additional Challenge

Specific individual tasks for pupils based on their skills and interests.

## Additional Support

This work can be completed in groups or as a whole class.

## Resources

Pens, pencils and recycled paper or computers for planning. Unwanted items to swap/sell.

## Suggested Follow-On Activities

Set up a permanent online group on the school website for a 'swap shop' that the whole school can use going forward.

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