Recycle Now with Busta Activity Pack

Introduction

This activity pack accompanies the film library, featuring Captain Busta and Lieutenant Pong and their explorations into different types of recycling.

The pack contains a wide range of classroom activities linked to the KS1 and KS2, English, Mathematics and Science curriculum, that can be used to encourage children to think differently about waste and recycling. The activities can also be used to inspire eco-teams and help children understand how to recycle right, both in school and at home. For example, children are encouraged to use the 'Recycling Locator'(recyclenow.com/local-recycling) as a handy tool to find out what can be recycled at home, and in their area.

The pack also contains:

- A fact sheet with lots of helpful facts and stats for you to use in your lessons.
- A waste audit activity and action plan to help your school develop (or build on) a waste reduction and recycling plan. A great new range of recycling signage, featuring Captain Busta has also been created for you to use throughout your school to encourage your children to recycle right (available on: resources.wastebuster.co.uk)

Benefits for Your School

All activities in this pack are curriculum linked and adaptable to your school setting and your pupils' individual needs. They also include actions that pupils and staff can take towards reducing waste, both at home and within the school community. Pupils will have an opportunity to discover that making small changes in their daily lives can reduce the amount of waste that ultimately ends up in the black bin, and make a difference.

By using the waste audit and action reduction plan (see separate support sheet), your school has the potential to make savings, raise funds and demonstrate a commitment to care for the environment - to become a more sustainable school. You can also use this activity to help gain or maintain an Eco-Schools award.





General activities you could carry out linked to recycling

- Set up a Wastebuster team (a great job for an Eco-Schools eco-committee or school council) and empower them to make sure there are no wrong items in any classroom recycling bins. Set up a rota for emptying recycling points and checking any items that are collected for returning, such as milk cartons are put in the right bins and placed ready for collection. The team should be able to award the best performing class of the week with extra playtime, or some other good incentive for motivation. Have a regular classroom recycling report at assemblies and celebrate the best performing class.
- Play a memory game. Ask the children to go on the 'Recycling Locator' (recyclenow.com/local-recycling) to find out what can be recycled locally and test how many they remember.
- If your school has received an Eco-Schools award or other accreditation for great recycling, celebrate your success by telling other people such as parents and the local press to promote your school ethics/eco-code.

Films and Activities

Topics covered: Plastic Recycling, Metal Recycling, Carton Recycling, Paper and Cardboard Recycling, Food Recycling (in-vessel composting), Food Recycling (anaerobic digestion) and Electricals Recycling.

Plastic Recycling

Film Overview

Busta and Pong are playing a game with Poogle (the spaceship's computer) exploring which types of plastic can be recycled. Busta and Pong are using an online tool 'Recycling Locator' to find out exactly which plastics you can recycle in your local area: recyclenow.com/local-recycling.

Pupil Learning Outcomes

- To be able to identify the types of plastics that can be recycled locally
- To have an increased awareness of the potential loss of resources if items are not recycled
- To understand the benefits of recycling plastics
- To have an understanding of how to use the 'Recycling Locator' to find out whether plastics can be recycled in their area





Classroom Activities – Plastics Key Stage 1 Science everyday materials

Sort household packaging into two groups: recyclable plastics and other recyclable rubbish.

- 1 Check what can be recycled in your area using the Recycling Locator: recyclenow.com/local-recycling
- 2 Either circle the items that can be recycled in your area and cross out the ones that can't OR cut them out and work together to put them into two groups: 1. Items that can be recycled in your area and 2. Items that can't be recycled in your area



As items that can be collected vary in different areas, we recommend using the Recycling Locator tool with your children to check what can be recycled in your area before completing this activity, as part of the learning: recyclenow.com/local-recycling





Key Stage 2 Science properties and changes of materials

KS2 Properties and Changes of Materials

List all the plastic items found in household waste that can be recycled locally by checking the Recycling Locator: recyclenow.com/local-recycling.

For example: Butter tubs Yoghurt pots Milk bottles Shampoo bottles Fruit tray

Discuss what products can be made by recycling plastic. Consider whether the properties of the plastic material effects the type of recycled product that can be made. See the list below for some example source materials (plastic items) and the recycled products they can become. Discuss why those items are suitable for making those products considering material properties (such as density and flexibility):

- New plastic bottles
- Seed trays
- Fleece jackets
- Fibre filling for sleeping bags and duvets
- The automative industry; car parts such as bumpers







Key Stage 1 Statistics (Maths)

Weekly plastic recycling



1.	Look at the diagram, what is this type of chart called? a) Pictogram b) Bar Chart c) Line Graph	
2.	On which day were the most shampoo bottles recycled?	Τ
3.	How many shampoo bottles were recycled on Monday?	
4.	How many shampoo bottles were recycled on Tuesday?	
5.	How many shampoo bottles were recycled on Wednesday?	
6.	How many shampoo bottles were recycled on Thursday?	
7.	How many shampoo bottles were recycled on Friday?	
8.	How many more shampoo bottles were recycled on Friday than on Monday?	
9.	On which day was the least amount of shampoo bottles recycled?	
10.	How many more shampoo bottles were recycled on Tuesday than on Monday?	





Key Stage 2 Statistics (Maths)



Look at the diagram, what is this type of chart called?
a) Pictogram b) Bar Chart c) Line Graph

2.	On which day(s) were the most bottles recycled?	•••••
3.	How many bottles were recycled on Monday?	•••••
4.	How many bottles were recycled on Tuesday?	•••••
5.	How many bottles were recycled on Wednesday?	•••••
6.	How many bottles were recycled on Thursday?	•••••
7.	How many bottles were recycled on Friday?	
8.	How many more bottles were recycled on Friday than on Monday?	
9.	On which day(s) were the least amount of bottles recycled?	
10.	How many more bottles were recycled on Tuesday than on Monday?	





Key Stage 1 Writing (English)

Design an information poster informing families of which plastic items can be recycled. Try using questions to engage the reader e.g. Did you know that all drinks bottles can be recycled?

Please see separate fact sheet for facts and stats about plastics.

Key Stage 2 Poetry (English)

Compose a cinquain poem to promote the recycling of household materials including plastics.

Remember that cinquain poems have five lines:

Line 1: A title (noun)	1 word
Line 2: A description	2 words
Line 3: Descriptive verbs	3 words
Line 4: Feeling (phrase)	4 words
Line 5: Title (synonym for the title)	1 word

For example

Recycling Sorting rubbish Reuse, reduce, recycle Stop wasting valuables resources Recycling





Food Waste Recycling

Film Overview

There are 2 food waste films. In the first, Busta finds out how valuable food waste can be, as it can be recycled into compost with special composting vessels (In-Vessel Composting). In the next film, Busta finds out how food can be recycled to generate power (Anaerobic Digestion). We recommend finding out which process is used in your local area (your local authority should be able to advise) and showing your children the appropriate film.

In the Anaerobic Digestion film, Busta finds out how, by recycling his banana skin, this can generate power with Pong's recycling machine that powers the ship. In the In-Vessel Composting film he finds out how his recycled banana skin, which is mixed with other garden and food waste, is made into compost and Poogle explains why recycling food is good for the environment in both films.

Learning Outcomes

- To understand that food waste recycling produces useful compost
- To understand that food waste recycling can produce energy
- To understand that recycling food waste is an environmentally friendly waste management option
- To have an increased awareness of the potential loss of resources if items are not recycled
- To have an understanding of how to use the 'Recycling Locator' to find out whether food waste can be recycled in their area





Classroom Activities – Food Key Stage 1 Science

KS1 Everyday materials

- List the food waste pupils produce at home that can be collected in food caddies in the kitchen ready for recycling and composting (this is everything including bones, egg shells, plate scrapings, peelings and out of date food taken out of its packaging).
- Find out if local authorities in your area collect food waste by using the Recycling Locator (recyclenow.com/local-recycling)

Key Stage 2 Science

KS2 Properties and changes of materials

• Design a leaflet explaining how food waste is composted using In-Vessel Composting or how Anaerobic Digestion can produce energy





Key Stage 1 Statistics (Maths)

Weekly food recycling

Monday	٢	3				3			
Tuesday	٢	3	3	3					
Wednesday	٢	٢	٢	3	٢	٢			
Thursday	3	3	3	3	3				
Friday		3	3		3	3	3	3	3

1.	Look at the diagram, what is this type of chart called? a) Pictogram b) Bar Chart c) Line Graph	
2.	On which day were the most apple cores recycled?	F
3.	How many apple cores were recycled on Monday?	•••••
4.	How many apple cores were recycled on Tuesday?	•••••
5.	How many apple cores were recycled on Wednesday?	
6.	How many apple cores were recycled on Thursday?	
7.	How many apple cores were recycled on Friday?	
8.	How many more apple cores were recycled on Friday than on Monday?	
9.	On which day was the least amount of apple cores recycled?	
10.	How many more apple cores were recycled on Monday than on Tuesday?	





Key Stage 2 Statistics (Maths)



The food recycled by Class P in one week

1. Look at the diagram, what is this type of chart called? a) Pictogram b) Bar Chart c) Line Graph

2.	On which day(s) was the most food recycled?	
3.	How many pieces of food were recycled on Monday?	
4.	How many pieces of food were recycled on Tuesday?	•••••
5.	How many pieces of food were recycled on Wednesday?	•••••
6.	How many pieces of food were recycled on Thursday?	•••••
7.	How many pieces of food were recycled on Friday?	•••••
8.	How many more pieces of food were recycled on Friday than on Monday?	•••••
9.	On which day(s) was the least amount of food recycled?	•••••
10.	How many more pieces of food were recycled on Tuesday than on Monday?	





Key Stage 1 Writing (English)

Write three sentences describing how to recycle food at home.

Key Stage 2 Poetry (English)

Design a leaflet promoting food waste recycling (either for composting or through a council collection) or Write an argument discussing the pros and cons of food waste recycling.





Carton Recycling

Film Overview

Busta and Pong look at how cartons containing milk, juice, soup and other foods can be recycled. Busta and Pong rinse and squash the cartons before putting them into their recycling bin. Poogle then shows Busta just how cartons are recycled.

Learning Outcomes

- To understand that recycling cartons is an environmentally friendly waste management option
- To have an increased awareness of the potential loss of resources if items are not recycled
- To understand how to use the 'Recycling Locator' to find out whether cartons can be recycled in their area





Classroom Activities – Cartons Key Stage 1 Science everyday materials

Try sorting household packaging into cartons, plastic containers and glass bottles. Describe how the different containers have different material properties.



Key Stage 2 Science properties and changes of materials

Explore how cartons are recycled and what the recycled product (carton board) is used for. Is the recycling of cartons a reversible or irreversible change?





Key Stage 1 Statistics (Maths)

Weekly cartons recycling



1.	Look at the diagram, what is this type of chart called? a) Pictogram b) Bar Chart c) Line Graph	
2.	On which day were the most cartons recycled?	F
3.	How many cartons were recycled on Monday?	•••••
4.	How many cartons were recycled on Tuesday?	
5.	How many cartons were recycled on Wednesday?	
6.	How many cartons were recycled on Thursday?	
7.	How many cartons were recycled on Friday?	
8.	How many more cartons were recycled on Friday than on Monday?	
9.	On which day were the least amount of cartons recycled?	
10.	How many more cartons were recycled on Monday than on Tuesday?	





Key Stage 2 Statistics (Maths)



Look at the diagram, what is this type of chart called?
a) Pictogram b) Bar Chart c) Line Graph

2.	On which day(s) were the most cartons recycled?	•••••
3.	How many cartons were recycled on Monday?	•••••
4.	How many cartons were recycled on Tuesday?	•••••
5.	How many cartons were recycled on Wednesday?	•••••
6.	How many cartons were recycled on Thursday?	•••••
7.	How many cartons were recycled on Friday?	•••••
8.	How many more cartons were recycled on Friday than on Monday?	•••••
9.	On which day(s) was the least amount of cartons recycled?	
10.	How many more cartons were recycled on Tuesday than on Monday?	•••••





Key Stage 1 Writing (English)

Some foods are packaged in cartons

Make a list of foods that can be packaged in cartons. (Examples of foods packaged in cartons include: milk, juice, soup, custard)

Write two or three sentences explaining how you should recycle cartons at home (rinse, squash, put the top back on if you can)

Key Stage 2 Writing (English)

Write top ten tips for recycling cartons at home and at school. Please note, this is a great activity for all types of waste.

Examples:

Recycling at home

- Have a recycling bin in every room of your house
- Check the Recycling Locator to see what can and can't be recycled: recyclenow.com/local-recycling
- Make sure everyone knows cartons can be recycled at home (a kitchen poster is ideal)
- Make sure they are empty and rinsed

Recycling at school

- Put rubbish bins and recycling points together so it's as easy to recycle as it is to throw something away
- Label recycling bins in your school so that people know cartons can be recycled and to avoid the wrong things being put in the wrong bin

There is now a great new range of recycling signage for you to use throughout your school, featuring Captain Busta. Simply download it from: resources.wastebuster.co.uk.

If in school, check whether companies will take returns such as milk cartons, for recycling.





Electrical Recycling

Film Overview

This film shows how electronic equipment is made up of a wide variety of materials, many of which can be recycled. Busta and Pong explain that electrical waste is the fastest growing type of waste that can readily be recycled. Pong explains why electricals should be recycled before showing them what happens to waste electrical items if they have been recycled.

Learning Outcomes

- To understand that recycling electronic equipment is an environmentally friendly waste management option
- To have an increased awareness of the potential loss of resources if items are not recycled
- To understand how to use the 'Recycling Locator' to find out whether electrical and electronic waste can be recycled in their area, at their kerbside or at Council Recycling Centres: recyclenow.com/local-recycling





Classroom Activities – Electricals Key Stage 1 Science everyday materials

KS1 Everyday materials

Make a list of electrical waste that households may dispose of i.e. phones, kettles, toasters, fridges, freezers, hairdryers, PS4s, TVs, laptops etc.

Use the Recycling Locator to show the children how to find out where they can be recycled locally: recyclenow.com/local-recycling

Research into the important materials that can be recycled from electrical waste. See the Fact Sheet for details and visit: recyclenow.com/recycling-knowledge/how-is-it-recycled/electricals

Key Stage 2 Science properties and changes of materials

List all the materials found in electrical waste that can be recycled. Try to name the different types of metals, plastics and dangerous materials found in a variety of electrical appliances.





Key Stage 1 Statistics (Maths)

Weekly electrical recycling

MondayDDDDTuesdayDDDDDDWednesdayDDDDDDDThursdayDDDDDDDFridayDDDDDDD

1.	Look at the diagram, what is this type of chart called? a) Pictogram b) Bar Chart c) Line Graph	
2.	On which day were the most kettles recycled?	W
3.	How many kettles were recycled on Monday?	
4.	How many kettles were recycled on Tuesday?	
5.	How many kettles were recycled on Wednesday?	
6.	How many kettles were recycled on Thursday?	
7.	How many kettles were recycled on Friday?	
8.	How many more kettles were recycled on Wednesday than on Friday?	
9.	On which day were the least amount of kettles recycled?	
10.	How many more kettles were recycled on Tuesday than on Friday?	





Key Stage 2 Statistics (Maths)



Look at the diagram, what is this type of chart called?
a) Pictogram b) Bar Chart c) Line Graph







Key Stage 1 Writing (English)

Make a list of the electrical and electronic items that are used each morning at home e.g. a list of items used while getting up, having breakfast and coming to school.

Key Stage 2 Writing (English)

Write a report about how much electrical waste is generated annually in the UK, how electrical waste can be recycled in your local area and the benefits of recycling.





Metal Recycling

Film Overview

Poogle takes Busta and Pong through the metal recycling process. Pong discovers that the Earth's crust contains ores that can be refined into metals. Poogle explains the benefits for recycling metals.

Learning Outcomes

- To recognise the difference between magnetic (ferrous) and non-magnetic (non-ferrous) metals which can be found in metal items
- To understand that recycling metals is an environmentally friendly waste management option
- To understand that metal recycling turns waste metal items into new metal products
- To have an increased awareness of the potential loss of resources if items are not recycled
- To understand how to use the 'Recycling Locator' to find out whether metals can be recycled in their area: recyclenow.com/local-recycling





Classroom Activities – Metals Key Stage 1 Science everyday materials

Test whether different materials contain steel by using a magnet.

Key Stage 2 Science properties and changes of materials

Investigate how mixtures of materials can be separated using magnets, solvents and sieves. Discuss why this is important when sorting household waste at recycling centres.





Key Stage 1 Statistics (Maths)

Weekly metal recycling



1.	Look at the diagram, what is this type of chart called? a) Pictogram b) Bar Chart c) Line Graph	
2.	On which day were the most cans recycled?	W
3.	How many cans were recycled on Monday?	
4.	How many cans were recycled on Tuesday?	
5.	How many cans were recycled on Wednesday?	
6.	How many cans were recycled on Thursday?	•••••
7.	How many cans were recycled on Friday?	•••••
8.	How many more cans were recycled on Wednesday than on Friday?	•••••
9.	On which day were the least amount of cans recycled?	
10.	How many more cans were recycled on Friday than on Tuesday?	





Key Stage 2 Statistics (Maths)



Look at the diagram, what is this type of chart called?
a) Pictogram b) Bar Chart c) Line Graph







Key Stage 1 Writing (English)

Design an information poster informing families that metal cans should be emptied and rinsed before placing in the recycling bin.

Key Stage 2 Writing (English)

Write a factsheet explaining why recycling metals helps protect the environment.

Use technical language and research facts: recyclenow.com/recycling-knowledge/how-is-it-recycled/cans

For example

All steel products are 100% recyclable.

Recycling one tonne of steel saves 1200 kg of iron ore and 500 kg of coal.

Energy saved from recycling one aluminium can will run a TV for three hours (see separate fact sheet for relevant facts and stats).





Paper and Cardboard Recycling

Film Overview

This film shows how paper and cardboard can be easily recycled. Poogle explains to Busta and Pong how paper and cardboard is recycled into new paper products.

Learning Outcomes

- To understand that recycling paper and cardboard is an environmentally friendly waste management option
- To identify the different items made from paper and cardboard and sorting those that can be recycled to reduce contamination
- To understand that paper and cardboard recycling turns waste paper items into new paper and cardboard products
- To have an increased awareness of the potential loss of resources if items are not recycled
- To understand how to use the 'Recycling Locator' to find out whether paper and cardboard can be recycled in their area: recyclenow.com/local-recycling





Classroom Activities – Paper and Cardboard Key Stage 1 Science everyday materials

KS1 Everyday materials

Pupils can group and classify different types of waste paper and card (crepe paper/ office paper etc) and see if the items are just paper/ cardboard (and are recyclable) or whether they might include any other materials such as plastic. For example, coffee cups or laminated sandwich packs.

Key Stage 2 Science properties and changes of materials

Decide which of the paper and card items can and can't be recycled and research why e.g. if it is plastic lined or has any other material on it that might be a contaminant, such as glitter on birthday cards and why this might cause a problem in the recycling process. Find out what products they could become when they have been recycled.

Items:

Newspapers	YES
Magazines	YES
Books	YES
Shredded office paper	YES
Cardboard boxes	YES
Cartons	YES
Cereal boxes	YES
Birthday cards with glitter on	NO
Wax lined baking paper	NO
Stickers	NO
Nappies	NO
Pizza boxes with pizza in	NO





Key Stage 1 Statistics (Maths)

Weekly cardboard recycling



1.	Look at the diagram, what is this type of chart called? a) Pictogram b) Bar Chart c) Line Graph	
2.	On which day were the most cereal boxes recycled?	F
3.	How many more cereal boxes were recycled on Monday?	
4.	How many more cereal boxes were recycled on Tuesday?	
5.	How many more cereal boxes were recycled on Wednesday?	
6.	How many more cereal boxes were recycled on Thursday?	
7.	How many more cereal boxes were recycled on Friday?	
8.	How many more cereal boxes were recycled on Tuesday than on Thursday?	
9.	On which day were the least amount of cereal boxes recycled?	
10.	How many cereal boxes were recycled on Friday than on Monday?	





Key Stage 2 Statistics (Maths)



Look at the diagram, what is this type of chart called?
a) Pictogram b) Bar Chart c) Line Graph

2.	On which day was the most cardboard recycled?	W
3.	How much cardboard was recycled on Monday?	
4.	How much cardboard was recycled on Tuesday?	
5.	How much cardboard was recycled on Wednesday?	
6.	How much cardboard was recycled on Thursday?	
7.	How much cardboard was recycled on Friday?	
8.	How much more cardboard was recycled on Tuesday than on Thursday?	
9.	On which day was the least amount of cardboard recycled?	
10.	How much more cardboard was recycled on Friday than on Monday?	





Key Stage 1 Writing (English)

Use the word RECYCLE to write an acrostic poem.

Begin each line with the letters of the RECYCLE.

Acrostics don't need to rhyme, and each line can be as long or as short as you want it to be.

Key Stage 2 Writing (English)

Write with pictures, the steps of the recycling process for paper and cardboard.





About us



Recycle now is the consumer facing campaign for WRAP. WRAP is a charity whose vision is a world in which resources are used sustainably. WRAP works with governments, businesses and communities to deliver practical solutions to improve resource efficiency.

Their mission is to accelerate the move to a sustainable, resource-efficient economy by:

- re-inventing how we design, produce and sell products
- re-thinking how we use and consume products
- re-defining what is possible through re-use and recycling
- WRAP are world leaders in helping organisations achieve greater resource efficiency.
- They have a record of success. Between 2010 and 2015 in England alone, WRAP initiatives reduced greenhouse gas emissions by nearly 50 million tonnes (Mt), which is equivalent to the annual carbon dioxide emissions of Portugal.
- They provide information, tools and practical advice that help governments, businesses and consumers to act.
- They provide a safe, non-competitive space where businesses can share best practice and collaborate to deliver change.

Recycle Now

Website:	recyclenow.com
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Wastebuster is a not-for-profit Community Interest Company (CIC) that deliver a national schools' waste education programme designed to foster positive values, attitudes and behaviours. Wastebuster specialise in environmental education, waste reduction and recycling campaigns that encourage children to carry the messages from curriculum, to campus and into the community. Fundamentally, Wastebuster aim to engage, inform and empower children to play a direct and active role in shaping their own future.

Almost all Wastebuster's work involves partnerships and collaborations. Wastebuster team up with not-for-profit agencies, NGOs and charities and form relationships with local councils, regional government offices and waste and utility companies. They also work with businesses that would like to activate positive change as part of their Corporate Social Responsibility commitment.

Wastebuster

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In partnership with the Ocado foundation



