

# Bin Busters! (Key Stage 1 and 2)

<b>Season:</b> All	<b>Duration:</b> Variable, depending on audit choice																	
<p><b>Overview:</b> Working with a lead class or your school 'green-team' we help sort, weigh and record the waste created by the whole school during either one lunchtime or one school day. We investigate how much waste would be produced over longer timescales and discuss ways this could be reduced. The Bin Buster team then feedback results and ideas for action to the whole school in a special assembly. We leave you with information and confidence to carry out follow-up audits later in the year to track your progress towards becoming a zero waste school.</p>																		
<p><b>Learning Objectives:</b></p> <ul style="list-style-type: none"> <li>To find out how much waste is produced during one school day or lunchtime and how much of this is land-filled, recycled or composted.</li> <li>To gain a better understanding of the three R's especially 'Reduce' and how to put these into action.</li> <li>To develop ideas for reducing the amount of waste the school sends to landfill.</li> </ul>	<p><b>Key Vocabulary:</b></p> <table> <tr> <td>Reduce</td> <td>Compost</td> </tr> <tr> <td>Re-use</td> <td>Packaging</td> </tr> <tr> <td>Recycle</td> <td>Plastic</td> </tr> <tr> <td>Waste</td> <td>Metal</td> </tr> <tr> <td>Rubbish</td> <td>Cardboard</td> </tr> <tr> <td>Sort</td> <td>Paper</td> </tr> <tr> <td>Weigh</td> <td>Kilograms</td> </tr> <tr> <td>Landfill</td> <td>Grams</td> </tr> </table>		Reduce	Compost	Re-use	Packaging	Recycle	Plastic	Waste	Metal	Rubbish	Cardboard	Sort	Paper	Weigh	Kilograms	Landfill	Grams
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<p><b>National Curriculum Links:</b></p> <p><b>KS1:</b> Science: KS1: Working scientifically Year 1: Everyday materials Year 2: Uses of everyday materials Mathematics: Year 1 &amp; 2: Number; Measurement.</p> <p><b>KS2:</b> Science: KS2: Working Scientifically Mathematics: Year 3-6: Number; Measurement.</p>																		
<p><b>Resources to be provided by school:</b></p> <p>Whole day audit: School to organise collecting one day's waste (recycling, rubbish and compostables) from all areas of school the day before the audit. Rubbish from each room/area should be bagged separately, labelled to show where it is from, and stored ready for sorting and weighing.</p> <p>Lunch Audit: Time-slot needed for Bin Buster briefing prior to lunchtime. Bin Buster team to supervise pupils to take their lunch waste to a central place for collection and sorting.</p> <p>Both audits require the use of a large indoor space for sorting and weighing rubbish and a time-slot for a whole-school assembly after the audit.</p>																		

# Bin Busters (Key Stage 1 and 2)

## Outline of Activities with approximate timings:

**Please note: We can tailor activities to suit the abilities of your pupils and time available.**

### For a Day Audit:

Bin Busters Mission Briefing (10-20 minutes)

- General introduction to the issue of waste disposal and the benefits of the 3Rs(reduce, reuse, recycle).
- Brief the team/ class on their Bin Busting Mission: To find out how much waste is produced during one school day, how much of this is land-filled, recycled or composted and how the whole school can reduce the amount of waste they send to landfill.
- Demonstrate how to sort each bag /container of rubbish into different material types, weigh each type using a spring balance and record the results. Stress the importance of wearing gloves throughout the process and hand-washing afterwards.

Sorting and Weighing (1 hour approx.- depending on number of bin busters and size of school)

Split Bin Busters into small groups to sort, weigh and record the rubbish from each area of the school: Each group is responsible for the waste from a different area of the school, which they empty onto plastic sheeting, sorted into material types, weigh using a spring balance and record in a results table. This is repeated until all of the rubbish has been recorded.

Collating and calculating (20 minutes)

Data from each group is collated and total weights for each material and area of school are calculated. We then calculate the total weight of rubbish that will go to landfill, how much will be recycled, how much composted, and extrapolate this data to give totals for longer timescales e.g. per week, term and school year.

Planning Action (20 minutes)

Using the results of the audit, children identify areas of school or material types that make significant contributions to the school's landfill waste and brainstorm ways of reducing this. From this we identify three actions that the whole school can put in place to help reduce waste sent to landfill.

Bin Buster Assembly Planning and Delivery (30 mins approx. planning and 10 mins delivery)

The Bin Busters plan and deliver a short assembly to feed-back the results of their audit and ideas for action to the whole-school.

### For a Lunchtime Audit:

Bin Busters Mission Briefing (10-20 minutes)

- Give a general introduction to the issue of waste disposal and the benefits of the 3Rs (reduce, reuse, recycle).
- Brief the team/ class on their Bin Busting Mission: to find out how much waste is produced during one lunchtime, how much of this is land-filled, recycled or composted and how the whole school can reduce the amount of waste they send to landfill.
- Demonstrate how to sort rubbish into different material types. Stress the importance of wearing gloves throughout the process and hand-washing afterwards.

Rubbish sort (most of lunchtime):

Just before lunchtime, Bin Busters set up a series of containers in the school hall/ dining area labelled for different material types e.g. paper, cardboard, plastic bottles, other plastic waste, cartons, aluminium, food waste etc. At the start of lunch Bin Busters/ Education Officer explain the sorting system to diners and ask them to sort all of their rubbish into the correct container, apart from items that they will legitimately be reusing. Throughout lunchtime the Bin Busters take turns to supervise and assist the sorting process.

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### Outline of Activities with approximate timings:

#### Lunchtime Audit (continued):

Weighing (20minutes approx)

After lunch, demonstrate how to weigh rubbish using a spring balance and how to record the results. Stress the importance of wearing gloves throughout the process and hand-washing afterwards. Bin Busters work in small groups to check through each container, then weigh and record the rubbish of each material type.

Collating and calculating (20 minutes)

Data from each group is collated and used to calculate: The total weight of rubbish that will go to landfill; the amount that will be recycled; and the amount that will be composted. Bin Busters also extrapolate this data to give totals for longer timescales eg per week, term and school year.

Planning Action (30 minutes)

Using the results of the audit, children identify which material types made significant contributions to the landfill waste and brainstorm ways of reducing this. From this we identify three actions that the whole school can put in place to help reduce waste sent to landfill. We then plan a short assembly to feedback these results and actions to the whole school.

Bin Buster Assembly (10 minute assembly)

The Bin Busting team deliver a short assembly to the whole school.

#### Eco- Schools Links:

Curriculum-linked activities and practical action on waste could be used as evidence towards an Eco Schools Award. For more information visit: <http://www.keepbritaintidy.org/ecoschools/>

#### Suggested follow-up activities:

The results of the audit and the ideas for action developed by the Bin Busting team will determine the types of activities carried out after an audit.

We will leave the Bin Busters with the confidence and information to carry out further bin-busting audits to track their school's progress towards becoming a zero waste school.

To discuss the provision of recycling services for your school by Somerset County Council contact Dennis McMullan from SCC Contract Support: 01823 356125  
dmcnullan@somerset.gov.uk

Useful Websites:

<http://www.somersetwaste.gov.uk> : Local waste and recycling information, top tips and facts.

<http://www.recyclenow.com/schools/index.html>: lots of general recycling information, plus tips and resources for schools.

<http://www.wastebuster.co.uk/> : Join Busta and Pong on their waste busting mission! Fun children's activities plus ideas and resources for teachers.

[http://www.reducereuserecycle.co.uk/greendirectory/kids\\_green\\_sites.php](http://www.reducereuserecycle.co.uk/greendirectory/kids_green_sites.php) : directory of fun, environmental- themed websites for children.