

Lesson	Think about all the things you throw away – have you ever considered the impact of this?	60-Minute Lesson
Learning Outcomes	<ul style="list-style-type: none"> • Understand the impact waste has on humans, wildlife and our planet • Understand the different types of waste, its impact and how to reduce it • Be able to change your behaviour to reduce your individual impact • Influence others to make a change as well 	
Resources Needed	<ul style="list-style-type: none"> • Pens • Paper • How Long Till It's Gone Cards & Teacher Resource • Plastic ID Cards (if required) • In Which Bin Cards & Teacher Resource • 7 R's Poster (if required) • Fox's Waste Adventure Activity Book (if required) 	
Additional Information	<p>This lesson can also be supported using Fox's Waste Adventure (Learning about a circular economy). The student activity book and supporting animation videos can be downloaded from the PECT website - BLUEPRINT PECT and YouTube page - Fox's Waste Adventure - YouTube</p> <p>We have highlighted these links throughout the lesson plan for your convenience.</p>	

Adaption maybe required depending on needs and age.

	Outline	Resources
Introduction 5mins	<p>A world of waste - every year we dump a massive 2.12 billion tons of waste. If all this waste was put on trucks they would go around the world 24 times. This stunning amount of waste is partly because 99 percent of the stuff we buy becomes waste within 6 months!</p> <p>Check out this waste calculator to see how much is being created as we speak - World Waste Facts (theworldcounts.com)</p>	
Activity – How do we dispose of our waste? 5mins	<p>Activity In small groups/pairs – how many different ways can you think of to dispose of our waste? – Class Discussion</p> <ul style="list-style-type: none"> • Landfill – this is when our waste is taken away and buried in the ground to decompose, however this does emit methane gases • Compost – organic material which has been left to decay to create a fertilizer for growing plants and food • Recycle – means that something is used again but this can only happen a certain number of times and requires high levels of energy • Burning – can create energy but is higher in carbon intensity <p>Other things you could consider are –</p> <ul style="list-style-type: none"> • Reuse – using something over and over again for either the same use or a new use • Donation – to a good cause, charity shop or someone else 	Pen Paper

<p>Activity – How long till it's gone? 15mins</p>	<p>Activity When waste goes to landfill we have to wait for everything to decompose, but how long does that take? Well, depending on what it is made from depends on how long it takes.</p> <p>In small groups/pairs – can you match the different items to the length of time you think it would take for them to decompose when thrown away into landfill?</p> <p>Class Discussion – What answers did you decide and why?</p> <p>These are not exact as the length of time it takes for something to decompose will differ depending on a number of factors –</p> <ul style="list-style-type: none"> • Soil/Land Type it has been buried in • Size/Thickness of the materials • Materials used and if these have been mixed with others • Conditions, this includes weather <p>We also have to factor in other impacts of our waste such as –</p> <ul style="list-style-type: none"> • Soil/Water Pollution • Chemical Pollution, from things like batteries where only their cases breakdown. • Methane/Toxic Fumes, creating air pollution • Animal Deaths, from eating or getting stuck in waste as well as the above <p>And even when we think we are doing something better, sometimes this is not always the case. For example, if you use a paper coffee cup instead of a plastic one, that cup would still take 30years to decompose. Even when we are told things are biodegradable this is only the case in properly managed waste facilities and not in regular landfill. We could recycle the cup instead but only once it has been rinsed and cleaned.</p>	<p>How Long Till It's Gone Cards & Teacher Resource</p>
<p>Activity – In which bin? 15mins</p>	<p>Activity Using the In Which Bin cards, in the same groups put the different waste items into the right bin? (if you want more of a challenge you can also add the Plastic ID Cards from the Truth of Plastic Waste Lesson Plan) Is there anything that you wouldn't put in the bins you have at home? Maybe you would dispose of it in a different way?</p> <ul style="list-style-type: none"> • Green Bin – Recycling – remember to clean everything before you put it in the bin. If there is any food, drink or left over contents this will contaminate the waste and prevent it all from being recycled • Brown Bin – Compost – remember this is organic material which can rot down, this doesn't include bones • Black Bin – General Waste – anything you can't recycle, compost or take to a collection point <p>Class Discussion – What did you put in each bin and why? Was there anything you couldn't agree on?</p> <p><i>You could complete this activity as a relay race and see what was put in each bin – does everyone agree?</i></p> <p><i>NB – bin colours and waste policies can vary with different councils.</i></p>	<p>How Long Till Its Gone Cards In Which Bin Cards & Teacher Resource Plastic ID Cards (if required)</p>
<p>Activity – How can we change our waste? 15mins</p>	<p>Not everything has to become waste! We have many ways of reducing this and thinking about it in a different way using the 7 R's</p> <ul style="list-style-type: none"> • Recycle – Can the materials used be recycled? • Reuse – Can the item or any part of it be reused? • Repair – Can the item be repaired or damaged parts replaced? 	<p>Pens Paper 7 R's Poster</p>

	<ul style="list-style-type: none"> • Return – Can the item be returned to the earth by naturally breaking down? • Refuse – Could we refuse to buy or accept things made or packaged in a certain way? • Reduce – Could we buy less? • Rethink – Do we need to rethink the design, use of materials etc to avoid waste? <p>(Please use our 7 R's Poster to support learning if required)</p> <p>Fox Link Explore more about changing from a Line to a Circle on pages 4 – 5 of the activity book. Or you could watch Fox's animations –</p> <ul style="list-style-type: none"> • Episode 1 – Reduce • Episode 2 – Reuse • Episode 3 – Recycle & Remake <p>Activity Each group/pair should select or be given one of the item cards from the last activity. Students should think about the 7 R's to come up with ideas and alternatives which will reduce waste.</p> <p>Fox Link You could use the Design Challenge on pages 12 – 13 of the activity book or consider sustainable swaps on page 8.</p>	
<p>Plenary 5mins</p>	<p>How much waste do you think you have created in your lifetime? Use this Waste Clock to find out - Waste Clock - Education (biffa.co.uk)</p> <p>How can we change the way we all look at our waste? What could we do differently? – Class Discussion</p> <p>Fox Link Create a waste action plan using pages 6 – 7 of the activity book</p>	
<p>Extension/ Homework Task</p>	<p>Create a poster to educate others on the impact of waste and what they could do to make a difference. Use all the different concepts you have explored – your poster could be based around one of the 7 R's, a specific material or an impact message.</p> <p>Think about your environment and what you think will have the biggest impact.</p>	<p>Pens Paper</p>