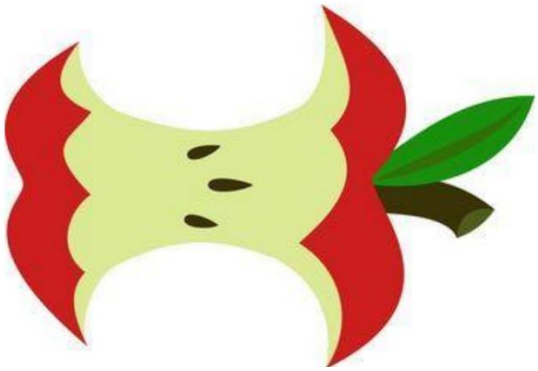
Quality First Education Trust

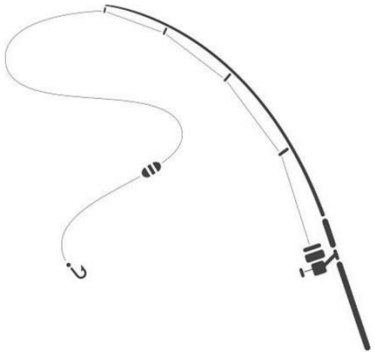
Wider Curriculum Unit Plan for Home learning		
Subject: Science	**Unit:** Where does our rubbish go? How long does it last?	**Year:** 1

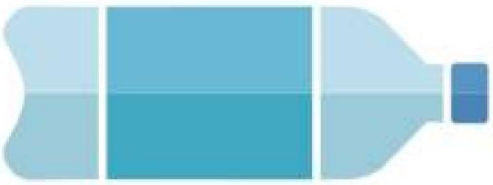
Session	
Session 1	**What is rubbish? How long does it last?** • Listen to this song about what happens to our rubbish. • Watch this video. What happens to food? This shows food rotting – this is also called breaking down or decomposing. How long will it take different rubbish to rot? • Look at the items in resource 1. Put them in order of which you think will take longest time to rot. • Now look at the answer table. What surprised you most? • Make some signs to go by a bin to tell people how long different items take to rot!
Session 2	**How can we reduce food waste?** • Watch this video about how we can waste less food. What did you learn? • Compare this video. Which video gives you the best information. – which video would you choose to share at school with year 1 and 2. Why? • Think about what you and your friends eat and throw away. Add your own ideas to the table in the resources for session 2 about some ways you could do this.
Session 3	**What is recycling?** • Watch this clip about what to do with your rubbish and complete the quiz. • Read about what items can be recycled (see resource for session 1). • Some rubbish we throw into our bins is waste that decays/ rots. T • Some rubbish can be recycled (used again) and should go into a recycling bin. • Make a list of items in your home that can be recycled. • Create a poster about which items can be recycled and which can't.
Session 4	**What can we re-use? (part 1)** • We can re-use items to reduce the amount of materials that we waste and throw away. For example, we can use a re-usable water bottle, instead of buying a plastic one each time. Re-using materials is better for the environment because it reduces waste. • Make a list of everything you can think of that is re-usable. • Design a reusable shopping bag that promotes the importance of protecting the environment (see resource below). You will need: a pencil and paper, colouring pencils/pens
Session 5	**What can we re-use? (part 2)** • Plastic rubbish is something we can help with. Watch this video to find out more about plastic problem. • Have a look through your recycling at home. Find some plastic packaging which you think you can re-use to make something • You could use the idea of a plastic piggy bank (see resource session 5) or come up with your own idea. You will need: an item from the recycling, a pencil, your imagination!
Session 6	**Review: What does reduce, re-use, recycle mean?** • Look back over the resources below • Design a poster to explain everything you've learned about reducing, reusing and recycling. Decide where it should go to remind about what to do with rubbish. • Include pictures and sentences to explain your ideas. You will need: a pencil and paper, colouring pencils/pens

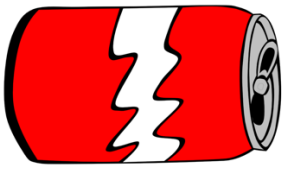
Support resources

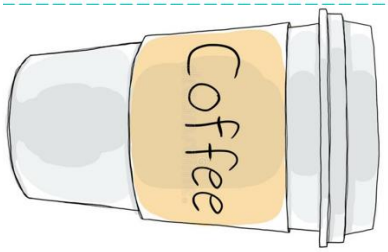
Session 1
Put these in order – which will take longest to rot?

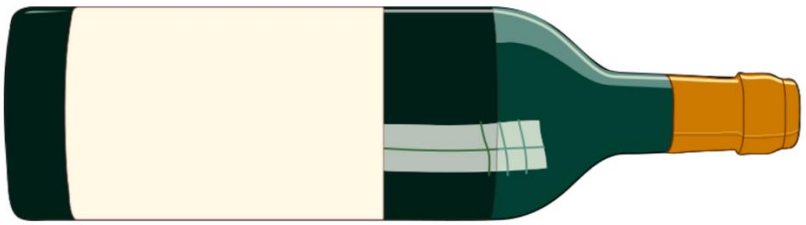










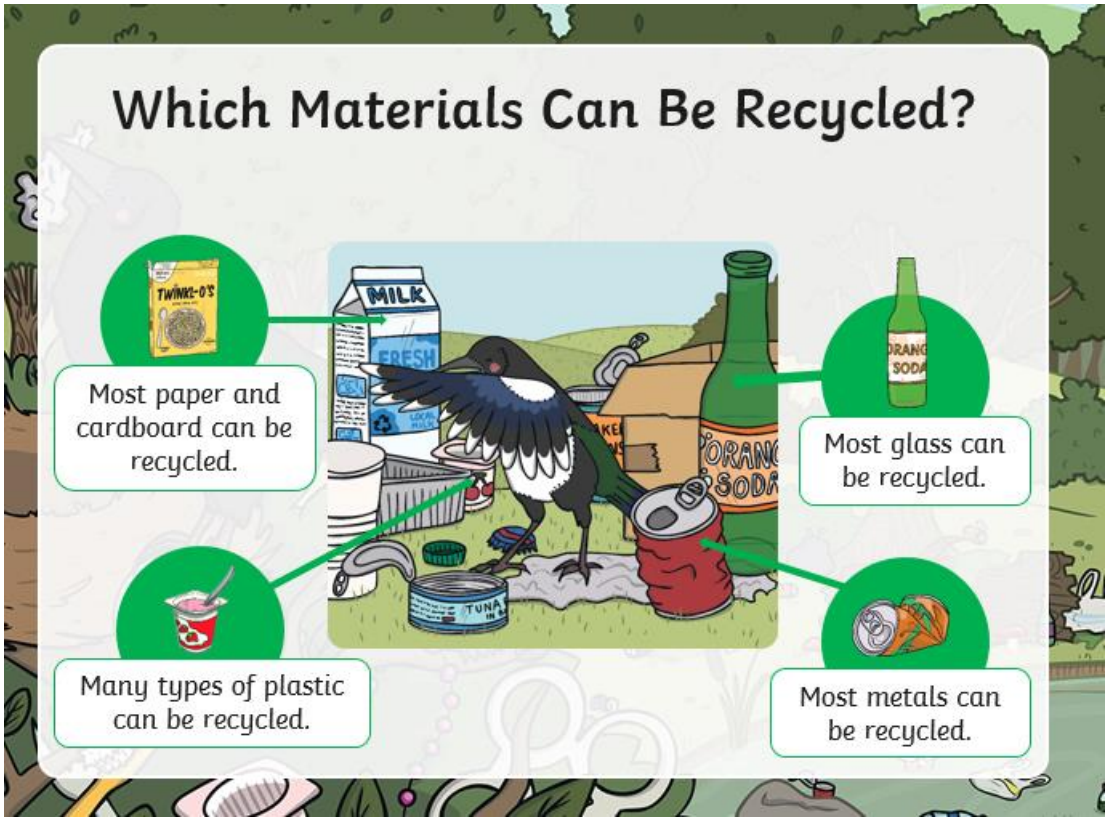


Type of rubbish	Time to break down
Apple core	1 month
Cardboard box	2 months
Balloon	4 years
Plastic bag	20 years
Coffee cup	30 years
Crisp packet	80 years
Drinks can	200 years
Plastic bottle	450 years
Fishing line	600 years
Glass bottle	1 million years

Session 2

Food I eat write or draw	**How much ends up as waste**	**How could there be less waste**
Bowl of cereal	A few spoonfuls	Pour what I need
Banana	The skin	Put in compost
Banana	Brown bits	Eat before it goes brown Make a cake
Sandwich	Crusts	Eat everything in my lunchbox Try something new

Session 3 – What is recycling?

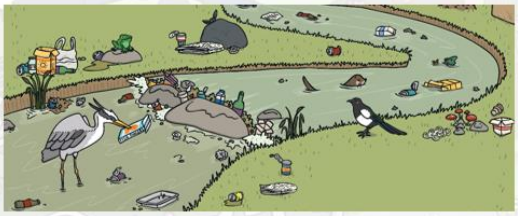


Why Is It Good to Recycle?

Recycling is good because it means that we have less rubbish littering our world.

This helps to protect animals and their homes by making sure less rubbish ends up in places like forests and seas.

It also means fewer trees are cut down to make new things.



Where Do We Put Our Recycling?

We can recycle our rubbish at home.

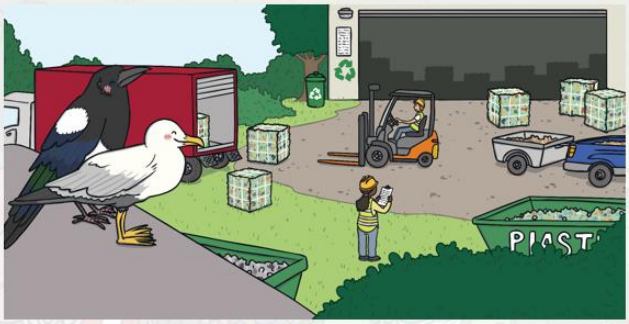
We put it in a **recycling bin** and a truck comes to empty the bin from outside our homes.

How Do We Recycle?

If you see this symbol on an object, it means that it can be recycled.

There are lots of different symbols on packaging that also mean you can recycle them – have a look at home and see if you can spot them!

Where Does Our Recycling Go?



The rubbish is sorted at a large place called a **recycling facility**. It is put into large bundles and taken to factories where it is turned into something new.

Session 2 – How can we reduce food waste?

Making Compost

Compost is important for growing healthy crops on an allotment because it adds nutrients to the soil that are essential in supporting a range of plant functions. Many allotment gardeners choose to make their own compost, using up surplus waste. So, what will you need to make your own compost on your allotment?

Compost bins come in varying shapes and sizes and can be made of either plastic or wood. Essentially, you just need a container that has a lid (this is important to prevent water creating a soggy mess) and a closing outlet at the bottom.

Green organic matter should make up around half of your compost heap as this will **decompose** quickly and help to nourish the microbes turning your waste into compost.

Examples of this include:

- fruit and vegetables
- uncooked kitchen waste
- grass cuttings
- green leaves

Try researching other green organic matter that you could compost.

Brown organic matter can vary from twigs and wood chippings, brown leaves and stems to shredded paper, card and straw.

Turn your compost heap regularly to ensure the different matter is well mixed and to add air to your mixture. This is essential in making better compost.

What other brown organic matter can be composted?

Think carefully about the position of your compost bin on your allotment – too warm or cold a position prevents the **bacteria** turning your waste into compost while too little or too much humidity stops the **micro-organisms** from decomposing the waste.

It is best if the base of your compost bin is sitting on soil rather than a hard base as this will allow it to drain easily and will get the **decaying** process started much quicker.

Glossary

Bacteria — A form of micro-organism.

Brown organic matter — Matter from the remains of plants or animals high in carbon.

Compost — The substance produced through composting (the recycling of organic matter through decomposition).

Compost bin — A container, often made of wood or plastic, where organic waste is recycled to make compost.

Decaying — The process whereby organic matter is broken down.

Decompose — To break down organic matter.

Green organic matter — Matter from the remains of plants or animals high in nitrogen.

Micro-organisms — A microscopic living thing.

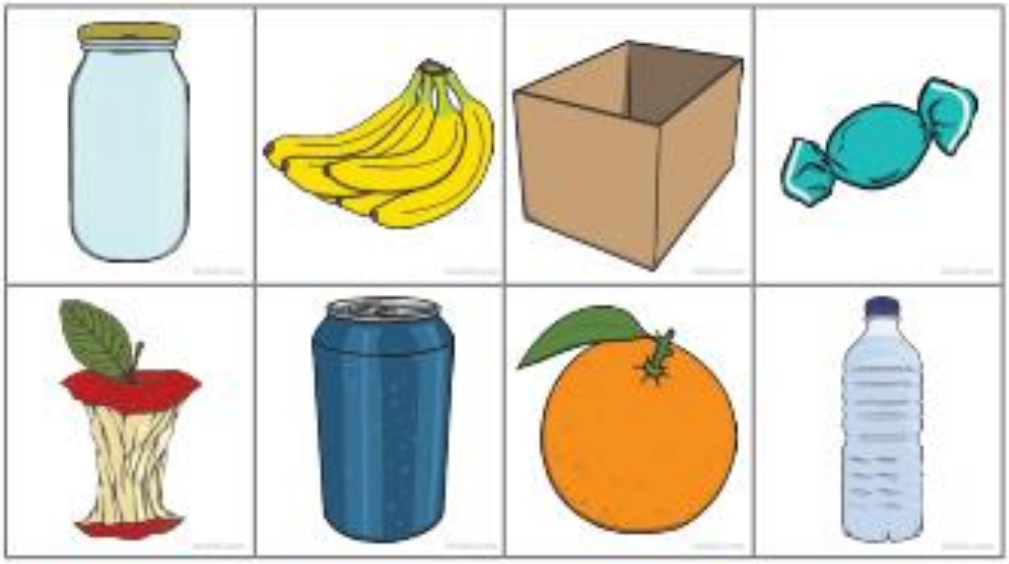
Nutrients — The substances required by plants and other living things to function, e.g. survive and grow.

Session 3 – What is recycling?

Recycling Sort

Directions: Cut and paste the pictures into the correct category.

Recycling 	Trash 



Challenge: can you add items to each of these columns from your home?

Session 4 – What can we re-use? (part 1)

Session 5 – What can we re-use? (part 2)

1. Pull out a plastic bottle from the recycling bin.
2. Wash it and let it air dry.
3. Glue 4 bottle caps to the side of the bottle - these will be the legs!
4. Draw 2 small circles on the top to act as the snout.
5. Cut out and glue paper ears onto the top of the bottle.
6. Draw 2 eyes on your pig.
7. Don't forget to cut a slot in the top for the money!
8. Use your recycled piggy bank to help the environment!