



LEARN
TO LOVE
NATURE 

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MAKING SOIL AS NATURE DOES

OVERVIEW

This Science and Design and Technology activity encourages young people to learn about compost as a natural process and to set up a collection system for your home or school.

OBJECTIVES

- To learn that composting is a natural process and an important part of the life cycle of plants
- To discover which foods can be composted and how to create a compost
- To provide real opportunities for pupils to take action to reduce food waste

WHAT YOU NEED

- Resource sheet 1: Compost or bin?
- Resource sheet 2: How to build your compost heap
- Resource sheet 3: Top tips for your compost heap



GET GOING

The project can start with a fun sorting game: compost or bin. Look at the cards in resource sheet 1 and decide which items go into the bin and which could go into the compost. Natural materials (e.g. vegetable peelings, fruit skin, grass cuttings etc.) break down over time whereas some human-made materials (e.g. plastic, metals) can last forever in the environment. Encourage young people to start composting food waste and set up a collection system at home or school. You can buy a compost bin or build one at home or in your school grounds as a Design and Technology project. Making compost is copying what happens in nature by recycling the nutrients found in plants to help new plants to grow. Not only is making compost good for plants, it also cuts down on the amount of food waste and is good for the planet! Composting also provides plenty of opportunities for scientific investigations, looking at how soil forms or studying the life of worms and other invertebrates. Setting up a collection system will help young people to develop their teamwork and communication skills.

RESOURCE SHEET 1: COMPOST OR BIN?



Apple core



Autumn leaves



chicken bones



cardboard



old carrots



rotten fruit



plastic bag



crisp packet



cut flowers



drink can



drink carton



egg box



egg shells



yogurt pot

RESOURCE SHEET 1: COMPOST OR BIN?



foam packaging



glass bottle



plastic bottle



newspaper



meat leftovers



fish leftovers



paper bag



orange peel



banana skin



tin



grass cuttings



old house plant

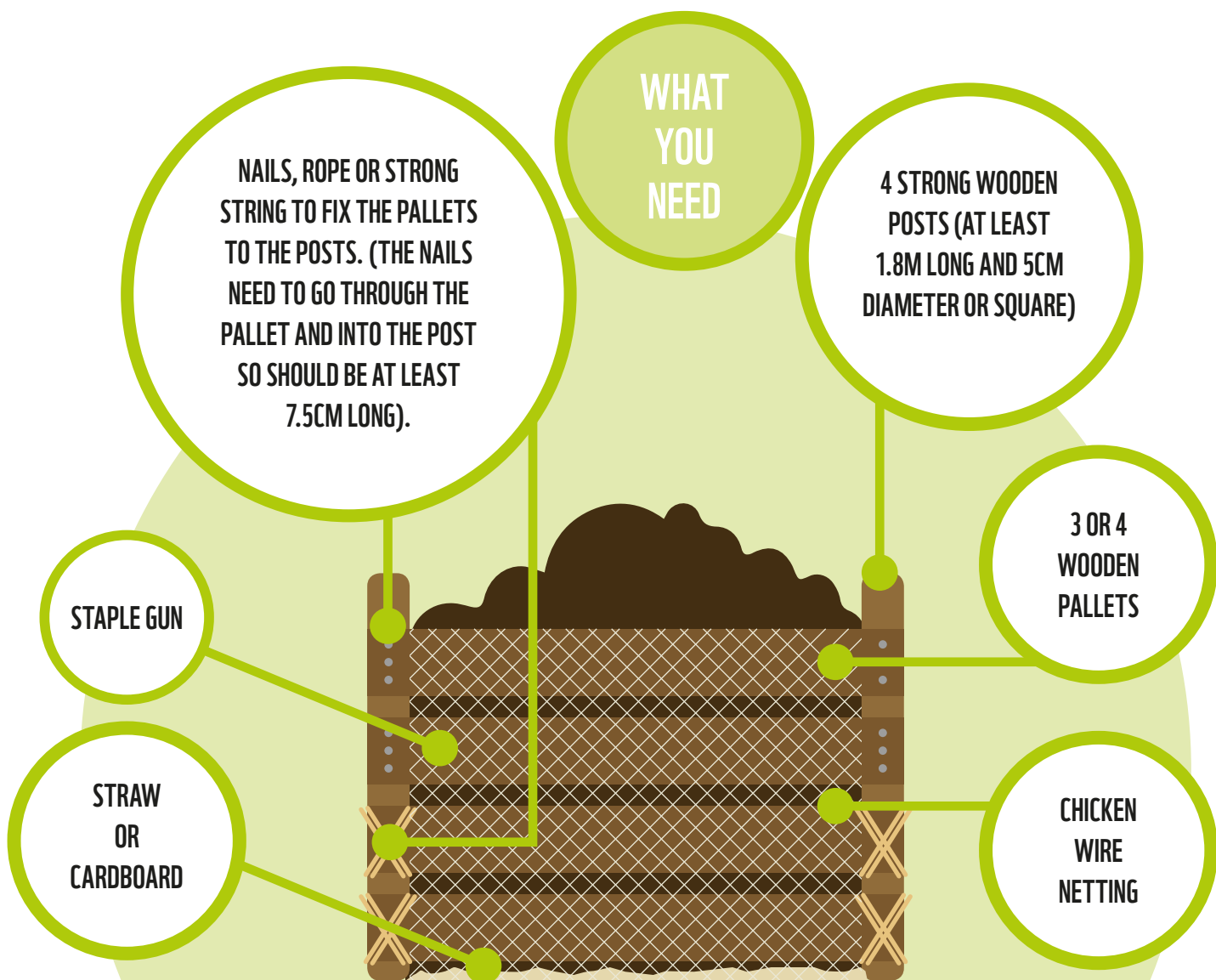


potato peels



cardboard box

RESOURCE SHEET 2: HOW TO BUILD A COMPOST HEAP



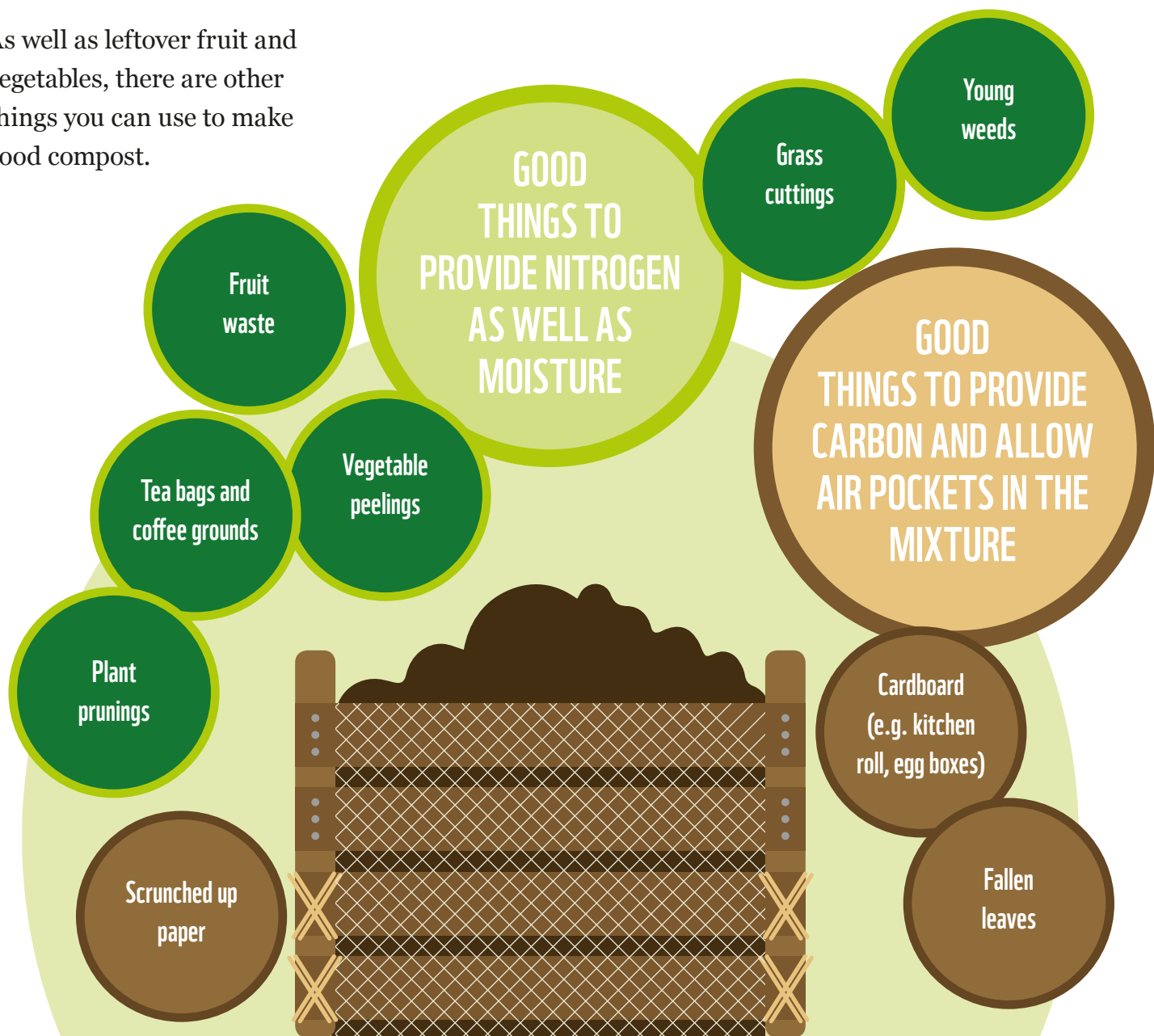
GET GOING

1. Choose the perfect spot for your compost heap, in a sunny or semi-shaded position, directly on the soil or turf and in a well-drained area.
2. Mark out a square – each side should be the same length as the pallets (or other wood) you use.
3. Dig in a post at each corner of your square with a hammer, deep enough so the heap doesn't collapse in a year or two.
4. Nail the three pallets at the sides and back of the heap to the posts, making sure they are really secure. You can also use rope to tie the pallets on.
5. Staple the chicken wire to the inside and outside of the pallets, and then fill the gap in between with straw. (This is optional but it helps to keep the heat in and speed up the composting process).
6. Spread some straw or cardboard on the base of your compost heap to make sure it will drain well. You can then tie a pallet to the front of the heap or leave it open and ready to go!



RESOURCE SHEET 2: TOP TIPS FOR YOUR COMPOST HEAP

As well as leftover fruit and vegetables, there are other things you can use to make good compost.



KEY NOTES

The key is to provide the right mix of ingredients and let nature do the rest. The perfect compost should have alternating layers of 'greens' (kitchen waste, grass cuttings) and 'browns' (cardboard, fallen leaves) for a good balance of nitrogen and carbon. If your compost is too wet, add more 'browns'. If it's too dry, add more 'greens'. Turning your compost heap also helps to aerate and mix up the waste, speeding up the process.

THINGS TO AVOID PUTTING IN YOUR HEAP:

- Meat, fish and dairy products or cooked food (as it can attract vermin)
- Diseased plants
- Perennial weeds (such as dandelion and thistle) or weeds with seed heads.