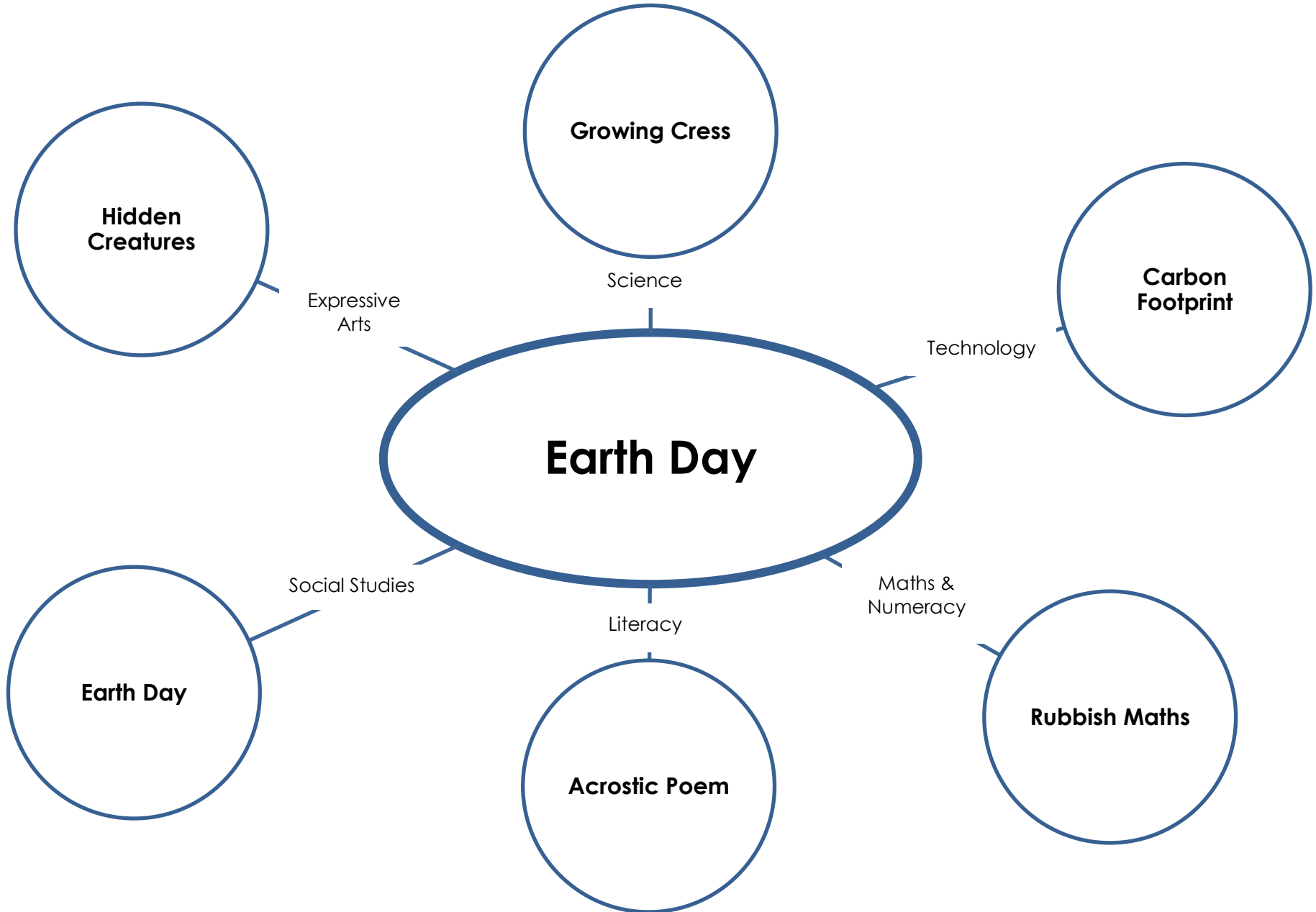


Learning from Home



Science Challenge



Growing Cress

Adult Support Required

All plants need water to grow. This is a simple experiment to prove it. Some of your plants will be watered, and some will not.



Cress is quick and easy to grow, so it is a good choice for investigations. White mustard seeds could also be used.

You Will Need: 2 growing containers e.g., eggshells, egg box or empty yoghurt pots, cotton wool, cress seeds (or mustard seeds), observation sheet to record your findings and your predictions (see below)

Instructions:

1. Talk to an adult about what you predict (think will happen) for the seeds that are watered and the seeds which are left dry before you start. Write it down in the observation sheet below.
2. Place cotton wool in the bottom of the growing containers (one wet, the other dry). Leave a 3cm gap between the cotton wool and the top of the growing container. Sprinkle the cress seeds on top of the cotton wool and press down gently with a finger.
3. Place your growing containers on a windowsill or in a light place. One should be clearly labelled "**Water**" and the other "**Do not water**".
4. The experiment should be carried out for a week. At the end of the week, look at the differences between the two containers, recording the findings on your observation chart. Use a ruler to measure any plants which have grown. Talk to an adult about your results?

	Prediction	Date	Description	Drawing	Measurement
Cress with water					
Cress without water					

Activity adapted from <https://ypte.org.uk>

Image from www.clipart-library.com

Technology Challenge



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Carbon Footprint

Adult Support and Supervision Required

You might have heard the term '**carbon footprint**' but what does it mean? Our carbon footprint is the amount of carbon dioxide (a gas which is causing Earth to get warmer) we produce because of our daily lives. Every living creature on Earth produces carbon dioxide. We do it in lots of ways including even just by breathing!



Task 1: Think about your own life and the activities which could be making your carbon footprint bigger.

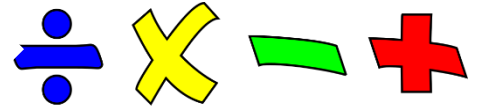
Task 2: Create a poster to show how to reduce your carbon footprint.

You Will Need: Large piece of paper or card, black paint, paint brush, coloured pens and / or pencils, warm soapy water and a towel (to wash your foot with!)

Instructions:

1. Talk to an adult about the daily activities you and your family do which might be adding to your carbon footprint, here are some examples: Driving in a car for a short distance, leaving lights and other items like TVs switched on, Buying food from other countries that travels great distances,, Wasting water leaving taps running, Having the heating on too high, Forgetting to recycle – adding to pollution and waste, Buying new clothes when you don't need them, etc.
2. Paint the bottom of your foot with black paint then carefully stand on your piece of paper to make a footprint. Carefully lift your foot off the paper and wash your foot without getting paint on anything else! Leave your footprint to dry. (If you don't have paint, you could just draw around your foot and colour it in)
3. You talked about the activities which were making your carbon footprint bigger earlier on, now think about how you could make it smaller. For example, if leaving lights on make it bigger, you could switch lights off when you're not using them. If leaving a TV switched on makes your carbon footprint bigger, switch off the TV and don't leave it on standby etc. See how many ideas you can come up with.
4. When your footprint is dry, write your ideas onto your poster – ask an adult for help if you need to. Try to think of a catchy title for your poster? 'How to Have a Small Carbon Footprint', Love the Planet – Keep Your Footprint Small' etc.

Maths & Numeracy Challenge



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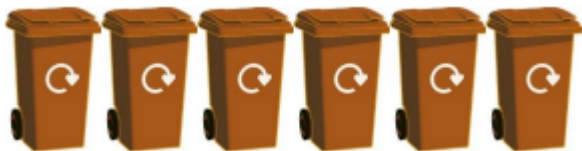
Rubbish Maths

A council has asked homeowners to put their bins out to be emptied.

1. How many grey bins are there?



2. How many brown bins are there?



3. How many more than 2 green bins are there?



4. How many less than 10 blue bins are there?



5. Which colour bin are there most of?

6. Which colour bin are there least of?

7. What is the total number of bins altogether?

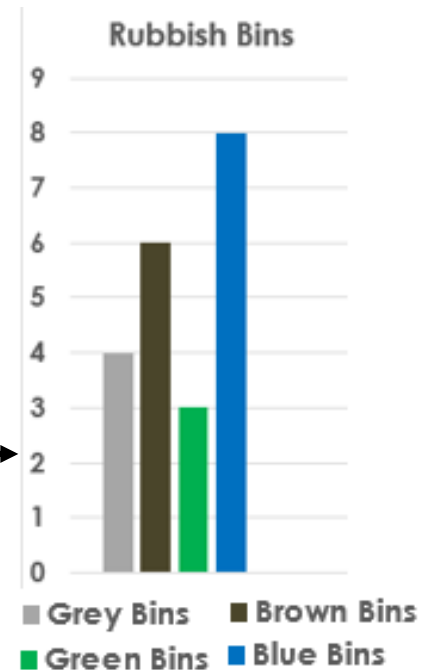
8. Have a go at drawing a bar chart like the one here to show the number of differently coloured bins.

Ask an adult or older brother/sister for help if you need

to. Talk to them about what the bar chart shows.



Images from and activity adapted from
<https://recycleforgreatmanchester.com/>



Literacy Challenge



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Acrostic Poem

Adult Support May be Required

Acrostic poems are very simple, and they have only a few easy rules.

To begin with, an acrostic is a poem in which the first letters of each line spell out a word or phrase. Usually, the first letter of each line is given a capital letter. This makes it easier to see the word spelled out vertically down the page.

Acrostics are easy to write because they don't need to rhyme, and each line can be as long or as short as you want it to be. See the example below.

Your Task: is to create an acrostic poem of your own to go with the Earth Day theme. Use the template below to write your poem. When you are finished, you might want to rewrite it in your best handwriting on a fresh sheet of paper and add some drawings to illustrate it. You could also use different colours for the capital letters that start each line.

Note: Talk to an adult about your ideas first if finding the right words is tricky.

The World



- W**onderful place
- O**utside is beautiful
- R**ound in shape
- L**arge and colourful
- D**ark at night

Earth

E _____

A _____

R _____

T _____

H _____

Social Studies Challenge



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Earth Day

Adult Support Required

Wondering what Earth Day is and how it got started? Earth Day is an event celebrated around the world every year (annual) on April 22. It is used to show support for environmental protection. It was first celebrated in 1970, and now includes events in more than 193 countries.



The best part about doing Earth Day activities is that the focus is on using what you already have. You are encouraged to reuse items in different ways. You could complete build something with items out of your recycling bin. You might also choose to buy loose bananas at the shop instead of picking the ones in plastic wrapping. Keep in mind that Earth Day activities can be done at any time of the year not just during the month of April! Good habits all year round are more effective than only making an effort for a short period of time. Try to learn about our amazing planet and how to care for it all year long!

Task: Talk to an adult about the questions below which are linked to the topic of Earth Day. Choose one of them to find out more about. You could use books, the internet and / or ask adults and / or older brothers or sisters at home. You can write down some simple notes on what you find out or you can make a poster.

- What can you recycle?
- What can you do around the house to conserve (save) energy?
- What do plants do for us and the Earth?
- Why shouldn't we litter and what is littering?
- What can we make from old or recyclable items?
- Who is Greta Thunberg and how has she contributed to the wellbeing of the planet?
- Who is David Attenborough and how has he contributed to the wellbeing of the Earth's wildlife?

Information from <https://littlebinsforlittlehands.com/>

Image from www.clipart-library.com



Expressive Arts Challenge



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Hidden Creatures

There are a staggering 10 million different species of plants and animals on earth. Scientists think there could be many that are yet to be discovered because they may live deep in our oceans or hidden away in rainforests.

Your Task: Invent your own animal – will it have a tail, claws, a beak, fur, scales or a mane? Will it be tall or crawl, be noisy, mischievous or sleepy? Can it climb, swim, run, jump or fly?

Draw, colour or paint your creature in the box below and think of a name for it. Think about these questions: How big is it? Does it have fur / feathers / scales? Where does it live? What does it eat? Does it lay eggs or give birth to live babies?



Activity adapted from <https://ypte.org.uk/>

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