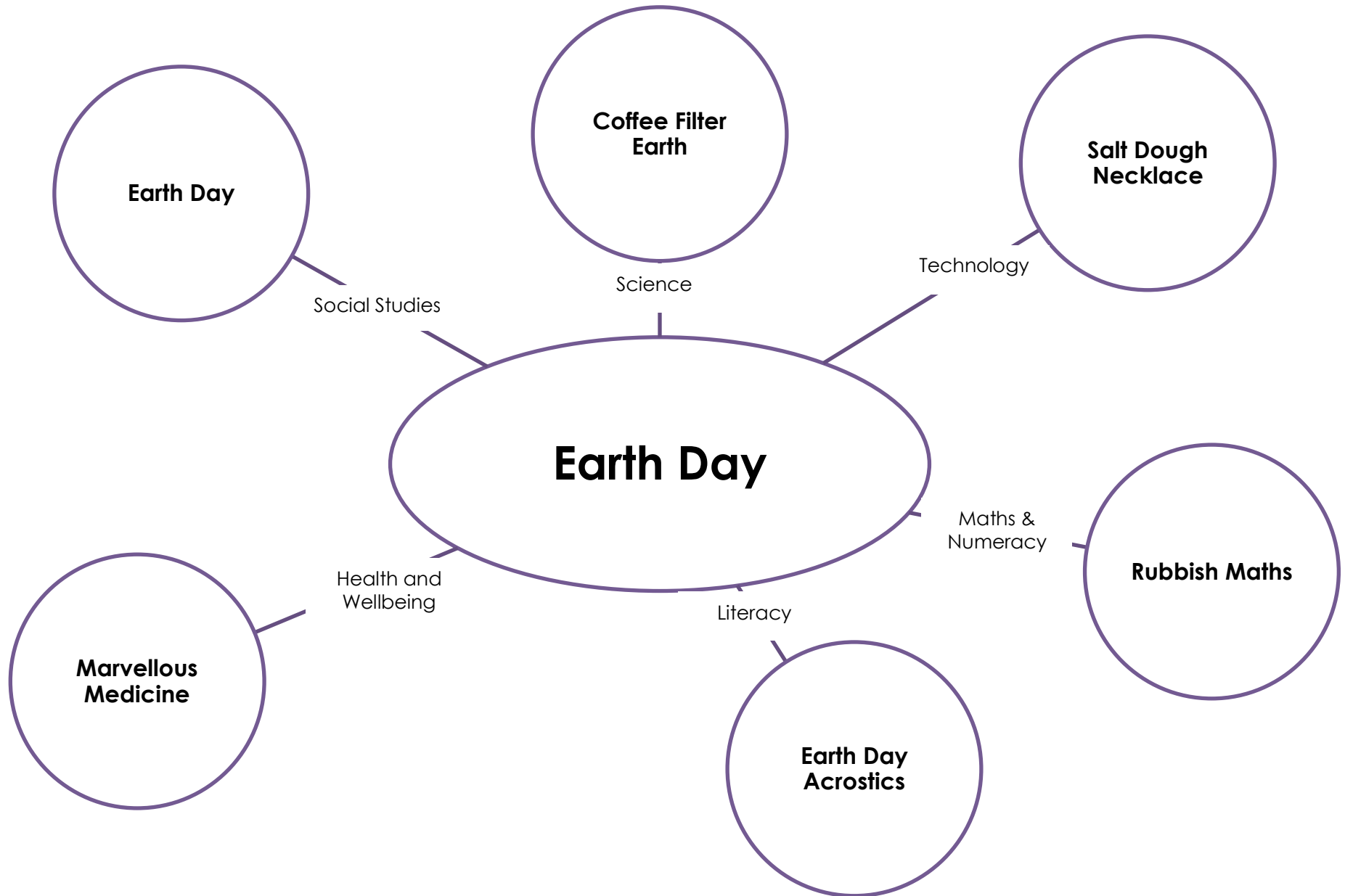


Learning from Home



Science Challenge



Coffee Filter Earth

Did you know that the ocean covers 71% of the Earth's surface and makes up 99% of the living space on this planet! Wow!

You Will Need: coffee filters, washable felt pen markers, glue stick, large size zipper food bag OR metal baking sheet tray, scissors, pencil, water spray bottle, atlas, printable backdrop (optional)

Instructions:

1. Flatten a round coffee filter and draw your Earth with the ocean and continents. (You might want to look at a map of the world first!)
TIP: If you want to make a coffee filter heart to go in the centre, choose pinks, reds, purples, or any colours you want and colour in a separate coffee filter. Or you can skip the coffee filter heart and cut out hearts from red construction paper or tissue paper or use stickers!
2. Place the coloured coffee filter on a large food zipper bag or metal baking sheet pan and then mist with a water spray bottle.
3. Watch the magic as the colours blend and the Earth comes to life! Set aside to dry.
4. Click [HERE](https://k4j6j9j8.rocketcdn.me/wp-content/uploads/2020/03/Earth-Day-Coffee-Filter-Craft.pdf) or follow the link below to download a free printable background . Decorate as you please.

<https://k4j6j9j8.rocketcdn.me/wp-content/uploads/2020/03/Earth-Day-Coffee-Filter-Craft.pdf>

5. Cut out a heart to add to the centre of your Earth if desired. Glue it to the centre of the Earth. Then glue the Earth to the centre of the printable!

The Science:

Why do the colours on your coffee filter Earth blend together? It's all to do with solubility. If something is soluble that means it will dissolve in that liquid (or solvent). The ink used in washable markers dissolves in the water.

In this Earth Day activity, the water (**solvent**) is meant to dissolve the marker ink (**solute**). For this to happen, the molecules (tiny particles) in both the water and the ink must be attracted to each other. When you added drops of water to the designs on the paper, the ink should have spread out and run through the paper with the water.



Activity and images from <https://littlebinsforlittlehands.com/>

Technology Challenge



This Photo by Unknown Author is licensed under [CC BY](https://creativecommons.org/licenses/by/4.0/)

Salt Dough Necklace

Adult Supervision Required

Try this Earth-friendly salt dough recipe for Earth Day! Transform a couple of simple household ingredients into a salt dough Earth model.

You Will Need: 2 cups all-purpose flour, 1 cup of salt, 1 cup of warm water, bread knife or fork, circle cutter, straw, string, paint, paint brush



Instructions:

1. Combine all the dry ingredients in a bowl and form a well (dip) in the centre.
2. Add the warm water to the well in the dry ingredients and mix together until it forms a dough. **NOTE:** If you notice the salt dough looks a little runny, you might be tempted to add more flour. Before you do this, allow the mixture to rest for a few moments! That will give the salt a chance to absorb the extra moisture.
3. Roll the dough to $\frac{1}{4}$ inch thick or so and cut out large circle shapes for your earth.
4. Use a bread knife or a fork to make an outline on the circle for land and ocean.
5. Use a straw to make a hole in the top of each ornament. Place on a tray and leave for 24 to 48 hours to air dry.
6. Once dry, paint your salt dough Earth.
7. Finish up by threading a piece of string through the hole in the necklace. Now you have a salt dough Earth necklace to hang up or wear.



How to Preserve the Salt Dough Necklace:

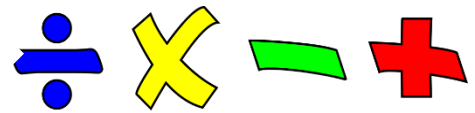
Your salt dough necklace is made from a mixture of flour and salt that creates a type of modelling clay, that can be baked or air-dried and then saved. Why is there salt in the dough? Salt is a great preservative, and it adds additional texture to your necklace. You'll notice the dough is heavier too! How long will a salt dough ornament last? It should last for many years. Store it in a dry, airtight container, away from heat, light or moisture and you will be able to enjoy this homemade necklace year after year.

What other things could you make with salt dough?

Activity and images from <https://littlebinsforlittlehands.com/>



Maths & Numeracy Challenge



This Photo by Unknown Author is licensed under [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)

Rubbish Maths

A weighbridge is a huge platform that weighs trucks when they drive onto it. At the recycling centre there are two weighbridges, one on the way in and one on the way out. Several trucks arrive at the recycling centre each day.



- Complete the calculations below to work out the amount of recycling and rubbish in some the council's trucks.

1. $20 - 10 = \underline{\quad}$	2. $60 - \underline{\quad} = 30$	3. $60 - 25 = \underline{\quad}$
4. $\underline{\quad} - 12 = 34$	5. $\underline{\quad} - 22 = 18$	6. $48 - \underline{\quad} = 27$

- The weight of an empty truck or container is called the "tare weight". Complete the table with the missing values.

Weight of the full truck on the way in tonnes (Name of Truck)	Tare weight in tonnes	Tonnes of recycling
20 (Dustin Bieber)	10	
60 (Trash Gordon)		30
60 (Bin Diesel)	25	
(Greta Binberg)	12	34
(Binny McBinface)	23	18
48 (Ter-Bin-Ator)		27



Images from www.clipart-library.com

Council Recycling



- Use the numbers from your table to draw and complete a bar chart like this one, showing the amount of recycling brought into the recycling depot by each truck.



Activity adapted from <https://recycleforgreatermanchester.com/>

Literacy Challenge



This Photo by Unknown Author is licensed under [CC BY-SA-NC](https://creativecommons.org/licenses/by-sa/4.0/)

Earth Day Acrostics

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.

Earth green and blue
 Amazing and wonderful
 Round and large
 Telling stories of life
 Heating up beneath a hot yellow sun.

Your Task: is to create an acrostic poem of your own to go with the Earth Day theme. You could choose the words Earth Day, or just the word Earth. The choice is yours.

Share your poem with someone at home.



Click here for more information about acrostic poems:

<https://www.bbc.co.uk/bitesize/topics/z4mmn39/articles/ztdvw6f>



Health & Wellbeing Challenge

Marvellous Medicine

Ever been stung by a nettle? What's the first thing you do? Say OW!!? And the second thing? You'd probably look for a dock leaf to rub on the sting and make it go away. Well rainforests are full of plants which could be used to cure many ailments and illnesses.



Already, one quarter of all medicines are made from ingredients first found in rainforest plants.

A special bark, found on the outside of the chinchona tree in the rainforest in Peru, has been used to make something called "quinine" which is used to treat malaria, a deadly disease which comes from mosquito bites in tropical countries. There's also the "sausage tree" which has been used to treat eczema and the rosy periwinkle of Madagascar which has been successfully used to treat a blood cancer called leukaemia.

Did you know?

Only 1% of rainforest plants have been studied. That leaves the other 99% which may hold the cures to many diseases.

Task: Choose one of these medicines that are derived from the rainforest. Do some research and find out more about where it comes from and how it is used. Which illness or illnesses is it used to treat? Etc.

quinine	novacaine	turbocuarine	aspirin
---------	-----------	--------------	---------

Information from www.yptenc.org.uk via TES Images from www.clipart-library.com

Social Studies Challenge



This Photo by Unknown Author is licensed under [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)

Earth Day

Wondering what Earth Day is and how it got started? Earth Day is an annual event celebrated around the world on April 22 to demonstrate 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. Reuse items in different ways. Complete a STEM challenge or two with items out of your recycling bin. Also Remember that Earth Day activities can be done at any time of the year not just during the month of April! Learn about our amazing planet and how to care for it all year long!

Task: Below is a list of great questions linked to the topic of Earth Day for you to think about. Choose one of them to research. You could use books, the internet and / or ask the adults at home. You can write up a report on what you find out or you can present it as 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?
- Why don't we dump rubbish in the ocean?
- 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?

[Earth Day Tips](#) | [Earth Day Network](#)

Information from <https://littlebinsforlittlehands.com/> Image from www.clipart-library.com

