

Starters for STEM are 10 activities that parents can use at home to help children develop their science, technology, engineering and maths skills. These activities are easy to resource and provide children with the stimulus to talk about the world around them. If you see a link you can explore how to extend these activities, you will need to sign up, for free, to access these materials. Don't forget to share your work on social media

#ScienceFromHome

Go on a treasure hunt

Walk around your home and/or the local area. Look for things that are alive. You could also collect some objects that were once alive and have never been alive in a small bag or an egg box. Once you finish your hunt, can you sort your objects into two groups?

<https://www.stem.org.uk/rx33gh>

Trees

Can you see any trees on a walk in your local area or from your window? Are they deciduous or evergreen trees? How can you tell? Can you name them? You can use some of the Tree-ID sheets here:

<https://bit.ly/3iOFIMQ>

Keeping Healthy

Watch this animation:

<https://www.bbc.co.uk/bitesize/clips/z8yd2p3>.

After you have watched it, make a poster of all the things you can do to stay healthy.

.Static electricity

Tear up paper into small pieces and put on a table. Blow up a balloon and rub it approximately 10 times back and forth on either your hair or a piece of clothing, a jumper works really well. Now hold the balloon over the paper, can you pick it up? Try placing your charged balloon next to a tap that is turned on, do you notice anything?

<https://www.stem.org.uk/rxvyr>

Life Cycles

Which kinds of animals and plants can you see outside at the moment? Draw a picture or take a photo of two or three of them. Can you name them? Do you know which part of their life cycle they are in? For example it may be a butterfly in its adult form. Or a dandelion clock? Find out about the stages in the life cycles of these organisms and draw some labelled diagrams of them.

<https://www.stem.org.uk/rx35b8>

.Brilliant boats

Using just 1 sheet of paper and some paperclips design a raft that will hold as many coins or marbles as possible. You can download the activity card here to help you.

<https://bit.ly/34E7YWs>

Uses of rocks

Go on a rock hunt around your home and in your local area. Where do you see rocks being used? Why do you think that rock has been chosen for that purpose? Think about the rock's properties.

Make a periscope

Take two pieces of card and wrap them in shiny foil. You will need to smooth it really carefully to create a mirror surface. (You can use two small mirrors if you have them too.) Holding one mirror in each hand can you use them to see around a corner? What do you have to do with each mirror? What about seeing over a wall? Can you work out how it works?

www.stem.org.uk/rxyxt

World's tallest tower!

In 2020 the new world's largest tower will be the Jeddah Tower, in Saudi Arabia. It will have 200 floors and will reach 1008 meters high. Use scrap paper and junk box materials to build a tower. You might like to search for photos of the 'Jeddah Tower' to help you with your design. What is the tallest tower you can build?

Broad bean diary

In an empty jar, swirl a small amount of water around and then empty it. Make a piece of kitchen roll damp and then put it in the jar. Put the broad bean seed in the jar so it rests on the kitchen roll. Every few days, spray the bean and kitchen roll with a little water. Create a diary with diagrams and notes of your bean and how it grows