

Starters for STEM

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

Best Bird Beak

Birds' beaks have adapted to be the best shape to pick up the food they eat. Try using chopsticks, a spoon, a clothes peg and tweezers to pick up rice, raisins, stones, seeds and spaghetti. Which beak is best for each food?

<https://www.stem.org.uk/rx32w3>

Tallest Tower

How can you make the tallest free standing tower from just one piece of A4 paper? You can use a pair of scissors, but no glue or tape is allowed.

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

Carrot Tops

Cut the top off a carrot and place it on a plate with some water. Watch what happens. Can you measure any growth?

New Roof for the Three Pigs

After the Big Bad Wolf blew down the 3 little pigs house they needed to repair the roof. They decided to make it waterproof to stop the rain coming in. Can you build them a roof that will stop the rain coming in?

<http://tiny.cc/htuZlZ>

Explore different materials to find the one that is most waterproof.

Wonderful weather

Keep a diary of today's weather. Was the weather better in the morning or in the afternoon?

<https://www.stem.org.uk/elibrary/resource/26225>

Make a telescope

Find a used kitchen roll tube and wrap a piece of card around it. Tape the outside cardboard roll so that it can slide. You can decorate it if you'd like.

Use your telescope to look at things really closely. What can you see through it?

Where has your food come from?

Have a look at the labels on 5 different types of food in your house. Where did they come from? Which place in UK or which country in the World? Which has travelled the furthest?

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

Water Music

Arrange some drinking glasses on a table. If you hit them with a pencil what sound do they make? Is each different? Now add different amounts of water to each glass. How has the sound changed? Can you compose a song to play on your water xylophone?

<http://tiny.cc/raw7lZ>

Who's on the menu?

Create a list of the animals in your garden from the largest visitor to the smallest insect. Who eats who? Can you create any food chains or a food web to show who's on the menu?

<http://tiny.cc/mw7lZ>

Making things move

Take a toy car, or any toy with wheels and give it a push on 4 different surfaces in your house or outside space.

Which surface do you think the car will go furthest on? Try it out a few times to find out. Can you find any other ways to make your toy car move?

<http://tiny.cc/fwv7lZ>