



Key Stage 2 – STEM Week

Hi all,

Welcome to STEM (Science, Technology, Engineering and Mathematics) Week! The tasks below give you the opportunity learn new and recap previously learnt skills, all based upon these areas of learning.

<p style="text-align: center;">Get coding!</p> <p>Practise your coding skills, without technology, using some of the activities on the website below. These will enable you to think about the steps and sequences that need to occur in order to begin computer coding and programming.</p> <p style="text-align: center;">http://info.thinkfun.com/stem-education/6-unplugged-coding-activities-for-hour-of-code</p>	<p style="text-align: center;">Get programming!</p> <p>Scratch provides you with the platform to practise your computing coding skills. The link below gives you tutorials on how to use it; as well as ideas of things that you can create such as animations and different styles of games.</p> <p style="text-align: center;">https://scratch.mit.edu/ideas</p>
<p style="text-align: center;">Get vlogging!</p> <p>Create a video of yourself talking about something that interests you. It could be a tutorial explaining how to do something or you just talking about something you enjoy or believe in. Show your video to your family.</p>	<p style="text-align: center;">Get constructing!</p> <p>Construct a zip wire or a similar thrill seeking experience for a mini figure or a small toy. What can you do to speed up the experience or slow it down?</p>
<p style="text-align: center;">Get designing!</p> <p>Design and make a bridge, using only paper and tape, which spans a gap of 30cm and can hold as much weight as possible. Add weight such as books / DVDs to see how much weight it can hold. The Rochester Bridge Trust – which supports engineering education – has a wide range of helpful techniques, ideas and guidance to strengthen your bridges.</p> <p style="text-align: center;">http://www.rochesterbridgetrust.org.uk/</p>	<p style="text-align: center;">Get traveling!</p> <p>Using the materials available to you within your house, create a wheeled moving vehicle which can travel top to bottom down a gentle slope. What difference does the surface your ramp is made from make?</p> <p>If you have someone else in your house who can make a vehicle – Which vehicle travels the furthest? Which one travels down the ramp the quickest?</p>
<p style="text-align: center;">Get building!</p> <p>Build a freestanding structure that you can fit in and makes you completely hidden from the outside world.</p> <p>What materials will you need? How can you ensure it is strong enough to stand on its own?</p>	<p style="text-align: center;">Get floating!</p> <p>Create a boat that successfully floats in a bowl / sink of water and can carry a load of at least a £1 coin.</p>
<p style="text-align: center;">Get mathematical!</p> <p>The Fibonacci sequence is a sequence of numbers where 2 preceding numbers are added together to find the next (0,1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144...)</p> <p>There is lots of evidence that representations of this sequence can be found in nature, represented as a spiral. Research and see what examples of this you can find. Can you draw your own representation?</p> <p style="text-align: center;">https://www.mensaforkids.org/teach/lesson-plans/fabulous-fibonacci/</p>	<p style="text-align: center;">Get debugging!</p> <p>Debugging is all about fixing problems that have occurred. Read through the story below and create a comic strip or a storyboard to show your understanding.</p> <p style="text-align: center;">https://drive.google.com/file/d/OB-uvt08wYSQqUVFBNjU0dTQ0YWM/view</p>