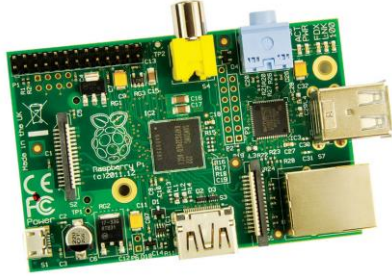

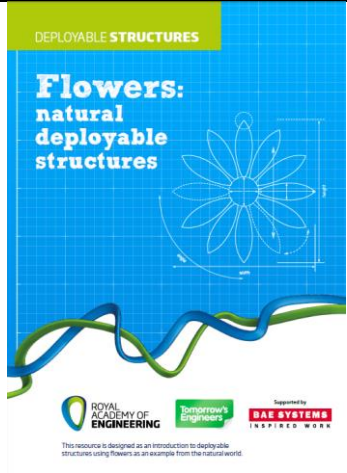
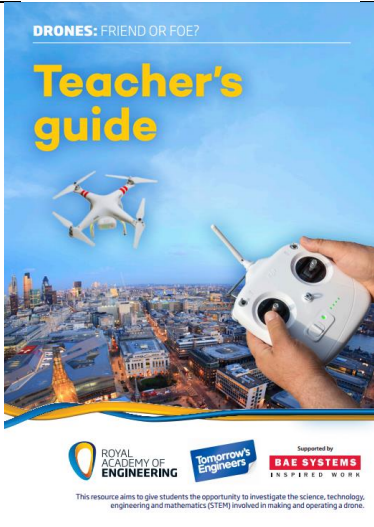


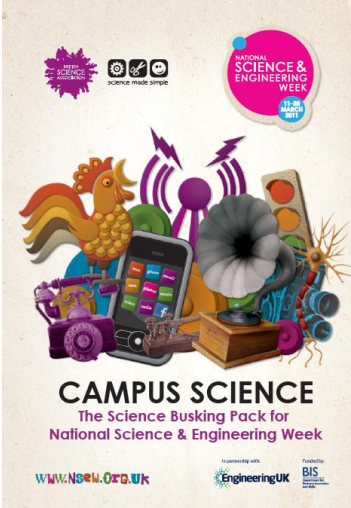

Resources for STEM Ambassadors

The following resources are available for STEM Ambassadors to loan and use in outreach activities. These items are located at the Museum of Science and Industry in Manchester. Should you wish to loan any of these resources please contact ambassadors@sciencemuseum.ac.uk

#	Resource	Image	Additional Information
1	<p>Raspberry Pi Kits (class set of 15 kits). Each kit contains (i) Cased Raspberry Pi Model B (ii) PiFace interface (iii) SD card with Raspian Software (Scratch/Python) (iv) Power cable (v) HDMI to DVI cable (allowing connection to monitors with DVI inputs) (vi) PiView adaptor (to connect to monitors with VGA inputs)</p>		<p>http://www.raspberrypi.org/</p>
2	<p>FLIR E4 Thermal Imaging Camera</p>		<p>http://www.flir.co.uk/instruments/display/?id=61194</p>

<p>3</p>	<p>UP Plus 2! 3D Printer (Limited filament supply is available)</p>		<p>http://www.pp3dp.com/index.php?page=shop.product_details&flypage=flypage.tpl&product_id=10&category_id=1&option=com_virtuemart&Itemid=37&vmcchk=1&Itemid=37</p>
<p>4</p>	<p>Disaster Response Box (Royal Academy of Engineering) Investigating how engineers save lives in the aftermath of a natural disaster. This resource focuses on the design and construction of temporary shelter and water filtration methods.</p>		<p>http://www.raeng.org.uk/education/schools/teaching-and-learning-resources/curriculum-resources</p>

<p>5</p>	<p>Deployable Structures (Maths Resources) (Royal Academy of Engineering). Linking the ideas of mathematics with applications in the real world of engineering. Activities in this box include:</p> <ol style="list-style-type: none"> (1) Flowers: Natural deployable structures (2) Mosquito nets (3) Rolling bridges (4) Maths beneath my feet (5) Solar Panels (6) Group umbrella. 		<p>http://www.raeng.org.uk/education/schools/teaching-and-learning-resources/curriculum-resources</p>
<p>6</p>	<p>Drones Friend or Foe Royal Academy of Engineering This resource gives students the opportunity to explore how drones work and how they can be used for civilian, humanitarian and commercial purposes.</p>		<p>http://www.raeng.org.uk/education/schools/teaching-and-learning-resources/curriculum-resources#drones</p>

<p>7</p>	<p>Existence at the Extreme This resource explores how engineers make it possible to live in extreme environments and comprises three activities:</p> <ol style="list-style-type: none"> (1) Sub Zero; (2) Monsoon; and (3) Desert 		<p>http://www.raeng.org.uk/RAE/media/Publications/Curriculum%20resources/EatE-teachers-guide.pdf</p>
<p>8</p>	<p>Science Busking BSA guide to science busking PDF guides available. Science busking makes use of everyday resources to create short scientific demonstrations that intrigue the audience and encourage them to engage in a conversation in the science behind the demonstration.</p>		<p>http://www.worc.ac.uk/documents/CampusScience.pdf</p>
<p>9</p>	<p>BBC: Mirco:bits (20 Micro:bits available to loan)</p>		<p>https://www.microbit.co.uk/</p>

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**Lego Mindstorm EV3 Robots
(4 available)**



<https://education.lego.com/en-us/products/lego-mindstorms-education-ev3-core-set-/5003400>