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## Suggested Books for supporting Bridge Engineering activities

Here are a few engineering favourites from the Rochester Bridge Trust's Education Team. This list is a collection of fiction and non-fiction books which can be used to support bridge engineering activities and wider reading. They make a great addition to a library's STEM collection or they could be given as prizes (or gifts).

Each book is listed with a suggested link and other purchasing information, as well as guidance for age range/suitability or level on Accelerated Reader ®.

<b>Title</b>	<b>Author</b>	<b>Theme</b>	<b>Link</b>	<b>Age/ATOS level</b>
Ada Lace on the Case	Emily Calandrelli with Tammy Weston	Science concepts, skills including observation	ISBN 978-1481485982 <a href="https://www.amazon.co.uk/ADA-Lace-Case-Adventure/dp/1481485989">https://www.amazon.co.uk/ADA-Lace-Case-Adventure/dp/1481485989</a> <a href="https://www.hive.co.uk/Product/Emily-Calandrelli/Ada-Lace-on-the-Case/21225732">https://www.hive.co.uk/Product/Emily-Calandrelli/Ada-Lace-on-the-Case/21225732</a>	Age 6-10
A Galaxy of Her Own: amazing stories of women in space	Libby Jackson	Space; female role models;	ISBN 978-1780898360 <a href="https://www.hive.co.uk/Product/Libby-Jackson/A-Galaxy-of-Her-Own--Amazing-Stories-of-Women-in-Space/21180450">https://www.hive.co.uk/Product/Libby-Jackson/A-Galaxy-of-Her-Own--Amazing-Stories-of-Women-in-Space/21180450</a>	Age 9-13
Apollo	Fitch, Baker & Collins	Space	ISBN 978-1910593509 <a href="https://www.amazon.co.uk/Apollo-Matt-Fitch/dp/1910593508/">https://www.amazon.co.uk/Apollo-Matt-Fitch/dp/1910593508/</a>	Age 6-11
Boy in the Tower	Polly Ho-Yen	Construction; civil engineering	ISBN 978-0552569163 <a href="https://www.fantasticfiction.com/h/polly-ho-yen/boy-in-the-tower.htm">https://www.fantasticfiction.com/h/polly-ho-yen/boy-in-the-tower.htm</a>	Age 9+ ATOS 5.3
Bridges!	Jennifer Swanson	Activity book; bridges; civil engineering	ISBN 978-1619305915 <a href="https://www.hive.co.uk/Product/Jennifer-Swanson/Bridges--With-25-Science-Projects-for-Kids/23175466">https://www.hive.co.uk/Product/Jennifer-Swanson/Bridges--With-25-Science-Projects-for-Kids/23175466</a>	Age 9-13
Bridges!	Carol A. Johmann &	Activity book; bridges; civil engineering	ISBN 978-1885593306	Age 9-13

	Elizabeth J. Rieth		<a href="https://www.amazon.co.uk/Bridges-Amazing-Structures-Design-Kaleidoscope/dp/1885593309/">https://www.amazon.co.uk/Bridges-Amazing-Structures-Design-Kaleidoscope/dp/1885593309/</a>	
Britain's Greatest Bridges	Joseph Rogers	Bridges; civil engineering	ISBN 978-1445684413 <a href="https://www.hive.co.uk/Product/Joseph-Rogers/Britains-Greatest-Bridges/23032880">https://www.hive.co.uk/Product/Joseph-Rogers/Britains-Greatest-Bridges/23032880</a>	Age 13+
Civil Engineering	David Muir Wood	Civil Engineering	ISBN 978-0199578634 <a href="https://www.hive.co.uk/Product/David-Muir-Wood/Civil-Engineering-A-Very-Short-Introduction/11732383">https://www.hive.co.uk/Product/David-Muir-Wood/Civil-Engineering-A-Very-Short-Introduction/11732383</a>	Age 14+
Counting on Katherine	Helaine Becker	Space; female role models; biography; maths	ISBN 978-1529005592 <a href="https://www.hive.co.uk/Product/Helaine-Becker/Counting-on-Katherine--How-Katherine-Johnson-Put-Astronauts-on-the-Moon/23213248">https://www.hive.co.uk/Product/Helaine-Becker/Counting-on-Katherine--How-Katherine-Johnson-Put-Astronauts-on-the-Moon/23213248</a>	Age 5-8
Clockwork (or All Wound Up)	Philip Pullman	Mechanical engineering; clockwork, gears	ISBN 978-0440866381 <a href="https://www.fantasticfiction.com/p/philip-pullman/clockwork.htm">https://www.fantasticfiction.com/p/philip-pullman/clockwork.htm</a>	Age 9+ ATOS 5.7
Ellie, Engineer	Jackson Pearce	Invention; engineering processes; pulleys, levers	ISBN 978-1681199481 <a href="https://www.amazon.co.uk/Ellie-Engineer-Jackson-Pearce/dp/1681195194">https://www.amazon.co.uk/Ellie-Engineer-Jackson-Pearce/dp/1681195194</a> <a href="https://www.hive.co.uk/Product/Pearce-Jackson-Pearce/Ellie-Engineer/21861126">https://www.hive.co.uk/Product/Pearce-Jackson-Pearce/Ellie-Engineer/21861126</a>	Age 8-12
Engineering	Tom Jackson	Engineering	ISBN 978-0-7534-7311-5 <a href="https://www.hive.co.uk/Product/Tom-Jackson/Basher-Science-Engineering--Machines-and-Buildings/19452625">https://www.hive.co.uk/Product/Tom-Jackson/Basher-Science-Engineering--Machines-and-Buildings/19452625</a>	Age 10-14
Frank Einstein and the Antimatter Motor	Jon Scieszka	Invention; engineering processes; robotics; motors	ISBN 978-1419724923 <a href="https://www.fantasticfiction.com/s/jon-scieszka/frank-einstein-and-the-antimatter-motor.htm">https://www.fantasticfiction.com/s/jon-scieszka/frank-einstein-and-the-antimatter-motor.htm</a>	Age 8+
Hidden Figures (young reader edition)	Margot Lee Shetterly	Space; female role models; maths	ISBN 978-0062662378 <a href="https://www.amazon.co.uk/Hidden-Figures-Readers-Margot-Shetterly/dp/0062662376/">https://www.amazon.co.uk/Hidden-Figures-Readers-Margot-Shetterly/dp/0062662376/</a>	Age 8-12
Hidden Figures (True story – picture book)	Margot Lee Shetterly	Space; female role models; maths	ISBN 978-0062742469 <a href="https://www.hive.co.uk/Product/Margot-Lee-Shetterly/Hidden-">https://www.hive.co.uk/Product/Margot-Lee-Shetterly/Hidden-</a>	Age 4-8

			<a href="https://www.waterstones.com/book/ada-lovelace/maria-isabel-sanchez-vegara/zafouko-yamamoto/9781786030757">Figures--The-True-Story-of-Four-Black-Women-and-the-Space-Race/21263004</a>	
Kensuke's Kingdom	Michael Morpurgo	Water filtration	ISBN 978-1405221740 <a href="https://www.hive.co.uk/Product/Michael-Morpurgo/Kensukes-Kingdom/5929989">https://www.hive.co.uk/Product/Michael-Morpurgo/Kensukes-Kingdom/5929989</a>	ATOS 4.7 Age 9-13
Lift the Flap Engineering	Rose Hall & Alex Frith	Engineering	ISBN 978-1474943659 <a href="https://www.hive.co.uk/Product/Rose-Hall/Lift-the-Flap-Engineering/21777029">https://www.hive.co.uk/Product/Rose-Hall/Lift-the-Flap-Engineering/21777029</a>	Age 4-8
Little People, Big Dreams: Ada Lovelace	Isabel Sanchez Vegara	Female role models; biography; maths; computing	ISBN 978-1786030757 <a href="https://www.waterstones.com/book/ada-lovelace/maria-isabel-sanchez-vegara/zafouko-yamamoto/9781786030757">https://www.waterstones.com/book/ada-lovelace/maria-isabel-sanchez-vegara/zafouko-yamamoto/9781786030757</a>	ATOS 4.2 Age 5-8
My Mummy is an engineer	Kerrine Bryan & Jason Bryan	Female engineers; careers	ISBN 978-0993276903 <a href="https://www.hive.co.uk/Product/Kerrine-Bryan/My-Mummy-is-an-Engineer/22719405">https://www.hive.co.uk/Product/Kerrine-Bryan/My-Mummy-is-an-Engineer/22719405</a>	Age 5-7
Operation Gadgetman!	Malorie Blackman	Invention; forensic science concepts	ISBN 978-0440863076 <a href="https://www.fantasticfiction.com/b/malorie-blackman/operation-gadgetman.htm">https://www.fantasticfiction.com/b/malorie-blackman/operation-gadgetman.htm</a>	Age 8+ ATOS 4.1
Rosie Revere Engineer	Andrea Beaty	Engineer; female engineers	ISBN 978-0419708459 <a href="https://www.hive.co.uk/Product/Andrea-Beaty/Rosie-Revere-Engineer/14987719">https://www.hive.co.uk/Product/Andrea-Beaty/Rosie-Revere-Engineer/14987719</a>	Age 5-7
Structural Engineering Learn it! Try it!	Tammy Laura Lynn Enz	Civil engineering	ISBN 978-1-51576430 <a href="https://www.hive.co.uk/Product/Tammy-Enz/Structural-Engineering--Learn-It-Try-It/22378650">https://www.hive.co.uk/Product/Tammy-Enz/Structural-Engineering--Learn-It-Try-It/22378650</a>	ATOS 5.1 Age 9-13
The 13-Storey Treehouse	Andy Griffiths	Invention; general science exploration	ISBN 978-1-4472-7978-5 <a href="https://www.fantasticfiction.com/g/andy-griffiths/13-story-treehouse.htm">https://www.fantasticfiction.com/g/andy-griffiths/13-story-treehouse.htm</a>	Age 6+ ATOS 3.9
The Firework Maker's Daughter	Philip Pullman	Chemistry	ISBN 978-0-440-86640-4 <a href="https://www.fantasticfiction.com/p/philip-pullman/fireworkmakers-daughter.htm">https://www.fantasticfiction.com/p/philip-pullman/fireworkmakers-daughter.htm</a>	Age 7+ ATOS 5.3
The Little Red Lighthouse & the Great Gray Bridge	Hildegard H Swift & Lynd Ward	Bridges	ISBN 978-0152045739 <a href="https://www.amazon.co.uk/Little-Lighthouse-Bridge-Reading-Rainbow/dp/0152045732/">https://www.amazon.co.uk/Little-Lighthouse-Bridge-Reading-Rainbow/dp/0152045732/</a>	Age 4-7

The Three Billy Goats Gruff	Mara Alperin, Kate Pankhurst	Bridges	ISBN 978-1848956858 <a href="https://www.hive.co.uk/Product/Mara-Alperin/The-Three-Billy-Goats-Gruff/14794825">https://www.hive.co.uk/Product/Mara-Alperin/The-Three-Billy-Goats-Gruff/14794825</a>	Age 3-8 ATOS ~3.0
The Tin Snail	Cameron McAllister	Forces, air resistance; levers, pulleys; invention	ISBN 978-0552574037 <a href="https://www.fantasticfiction.com/m/cameron-mcallister/tin-snail.htm">https://www.fantasticfiction.com/m/cameron-mcallister/tin-snail.htm</a>	Age 8+
The True Story of the 3 Little Pigs!	Jon Scieszka	Materials	ISBN 978-0140540567 <a href="https://www.fantasticfiction.com/s/jon-scieszka/true-story-of-three-little-pigs.htm">https://www.fantasticfiction.com/s/jon-scieszka/true-story-of-three-little-pigs.htm</a>	Age 5+ ATOS 3.0
We're going on a bear hunt!	Michael Rosen	Bridges (going over obstacles)	ISBN 978-1406363074 <a href="https://www.hive.co.uk/Product/Michael-Rosen/Were-Going-on-a-Bear-Hunt/24072412">https://www.hive.co.uk/Product/Michael-Rosen/Were-Going-on-a-Bear-Hunt/24072412</a>	ATOS 1.3 Age 4-7
You wouldn't want to live without clean water!	Roger Canavan	Water purification	ISBN 978-1910184080 <a href="https://www.hive.co.uk/Product/Roger-Canavan/You-Wouldnt-Want-To-Live-Without-Clean-Water/17055073">https://www.hive.co.uk/Product/Roger-Canavan/You-Wouldnt-Want-To-Live-Without-Clean-Water/17055073</a>	Age 9-13
You wouldn't want to live without coding!	Alex Woolf	Computing; Maths	ISBN 978-1912537051 <a href="https://www.salariya.com/books/you-wouldnt-want-live-without-coding-0">https://www.salariya.com/books/you-wouldnt-want-live-without-coding-0</a>	Age 8-12
You wouldn't want to live without electricity!	Ian Graham	Electricity	ISBN 978-0531213070 <a href="https://www.salariya.com/books/you-wouldnt-want-live-without-electricity">https://www.salariya.com/books/you-wouldnt-want-live-without-electricity</a>	Age 8-11
You wouldn't want to live without gravity!	Anne Rooney	Forces; Gravity	ISBN 978-1910706350 <a href="https://www.salariya.com/books/you-wouldnt-want-live-without-gravity">https://www.salariya.com/books/you-wouldnt-want-live-without-gravity</a>	Age 8-11
You wouldn't want to live without numbers!	Anne Rooney	Maths	ISBN 978-1911242291 <a href="https://www.salariya.com/books/you-wouldnt-want-live-without-numbers">https://www.salariya.com/books/you-wouldnt-want-live-without-numbers</a>	Age 8-11
You wouldn't want to live without robots!	Ian Graham	Technology; computing	ISBN 978-1912537068 <a href="https://www.hive.co.uk/Product/Ian-Graham/You-Wouldnt-Want-To-Live-Without-Robots/22226409">https://www.hive.co.uk/Product/Ian-Graham/You-Wouldnt-Want-To-Live-Without-Robots/22226409</a>	Age 8-12

You wouldn't want to live without satellites!	Ian Graham	Space	ISBN 978-1912537099 <a href="https://www.hive.co.uk/Product/Ian-Graham/You-Wouldnt-Want-To-Live-Without-Satellites/22226412v">https://www.hive.co.uk/Product/Ian-Graham/You-Wouldnt-Want-To-Live-Without-Satellites/22226412v</a>	Age 8-12
You wouldn't want to live without Simple Machines!	Anne Rooney	Technology; Engineering; forces; levers, pulleys	ISBN 978-1912537082 <a href="https://www.brownsbfs.co.uk/Product/Rooney-Anne/You-wouldnt-want-to-live-without-simple-machines/9781912537082">https://www.brownsbfs.co.uk/Product/Rooney-Anne/You-wouldnt-want-to-live-without-simple-machines/9781912537082</a>	Age 8-12

Age ranges are indicational only, adults should consider the individual abilities of children in relation to each book and suitability of the content therein. Links provided are a guide and not indications of outlets recommended by the Rochester Bridge Trust.

Don't forget that the Rochester Bridge Trust has its own books to help you to carry out a range of civil engineering activities and challenges! They are all available to download, free of charge, from our website by following the links below:

Learning About Bridges Book 1

<http://www.rochesterbridgetrust.org.uk/exploring-engineering/lesson-plans/>

Exploring Engineering Challenges

<http://www.rochesterbridgetrust.org.uk/exploring-engineering/>

Hard copies of all four of our books can be requested from us, free of charge by contacting us at [education@rbt.org.uk](mailto:education@rbt.org.uk)