

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 ®.

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

| | Elizabeth J. | | https://www.amazon.co.uk/Brid | |
|--------------------------|-------------------|----------------------------|--|-----------|
| | Rieth | | ges-Amazing-Structures- | |
| | T C C C C | | Design- | |
| | | | Kaleidoscope/dp/1885593309/ | |
| Britain's Greatest | Joseph Rogers | Bridges; civil engineering | ISBN 978-1445684413 | Age 13+ |
| Bridges | 1.090.0 | | https://www.hive.co.uk/Product | |
| 3 3 | | | /Joseph-Rogers/Britains- | |
| | | | Greatest-Bridges/23032880 | |
| Civil | David Muir | Civil | ISBN 978-0199578634 | Age 14+ |
| Engineering | Wood | Engineering | | |
| | | | https://www.hive.co.uk/Product | |
| | | | /David-Muir-Wood/Civil- | |
| | | | Engineering-A-Very-Short- | |
| | | | Introduction/11732383 | |
| Counting on Katherine | Helaine Becker | Space; female role models; | ISBN 978-1529005592 | Age 5-8 |
| | | biography; | https://www.hive.co.uk/Product | |
| | | maths | /Helaine-Becker/Counting-on- | |
| | | | KatherineHow-Katherine- | |
| | | | Johnson-Put-Astronauts-on-the- | |
| 01 1 1 | B1 :11: | | Moon/23213248 | |
| Clockwork | Philip | Mechanical | ISBN 978-0440866381 | Age 9+ |
| (or All | Pullman | engineering; | https://www.fantacticfiction.co | ATOS 5.7 |
| Wound Up) | | clockwork, | https://www.fantasticfiction.co m/p/philip- | |
| | | gears | <u>pullman/clockwork.htm</u> | |
| Ellie, | Jackson | Invention; | ISBN 978-1681199481 | Age 8-12 |
| Engineer | Pearce | engineering | 1351 370 1001133401 | Age 0 12 |
| Linginicei | l caree | processes; | https://www.amazon.co.uk/Ellie | |
| | | pulleys, levers | -Engineer-Jackson- | |
| | | , , , | Pearce/dp/1681195194 | |
| | | | | |
| | | | https://www.hive.co.uk/Product | |
| | | | /Pearce-Jackson-Pearce/Ellie- | |
| | _ | | Engineer/21861126 | |
| Engineering | Tom Jackson | Engineering | ISBN 978-0-7534-7311-5 | Age 10-14 |
| | | | https://www.amazon.co.uk/Bas | |
| | | | her-Science-Engineering- | |
| | | | Riveting- Buildings/dp/0753473100 | |
| Frank | Jon | Inventions | ISBN 978-1419724923 | Ago 9 I |
| Einstein and | Scieszka | Invention; engineering | 1300 370-1413/24323 | Age 8+ |
| the | JCICSZNA | processes; | https://www.fantasticfiction.co | |
| Antimatter | | robotics; | m/s/jon-scieszka/frank- | |
| Motor | | motors | einstein-and-the-antimatter- | |
| | | | motor.htm | |
| Hidden | Margot Lee | Space; female | ISBN 978-0062662378 | Age 8-12 |
| Figures | Shetterly | role models; | | |
| (young | | maths | https://www.amazon.co.uk/Hid | |
| reader | | | den-Figures-Readers-Margot- | |
| edition) | | | Shetterly/dp/0062662376/ | |
| Hidden | Margot Lee | Space; female | ISBN 978-0062742469 | Age 4-8 |
| Figures (True | Shetterly | role models; | https://www.hive.co.ul/Duaduat | |
| story – | | maths | https://www.hive.co.uk/Product | |
| picture book) | <u> </u> | <u>l</u> | /Margot-Lee-Shetterly/Hidden- | |

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|----------------|-------------|-------------|--|------------|
| | | | FiguresThe-True-Story-of- | |
| | | | Four-Black-Women-and-the- | |
| | | | Space-Race/21263004 | |
| Kensuke's | Michael | Water | ISBN 978-1405221740 | ATOS 4.7 |
| Kingdom | Morpurgo | filtration | | Age 9-13 |
| | | | https://www.amazon.co.uk/Ken | |
| | | | sukes-Kingdom-Michael- | |
| | | | Morpurgo/dp/1405221747 | |
| Lift the Flap | Rose Hall & | Engineering | ISBN 978-1474943659 | Age 4-8 |
| Engineering | Alex Frith | | | |
| J J | | | https://www.hive.co.uk/Product | |
| | | | /Rose-Hall/Lift-the-Flap- | |
| | | | Engineering/21777029 | |
| Little People, | Isabel | Female role | ISBN 978-1786030757 | ATOS 4.2 |
| • • | | | 13BN 976-1760030737 | |
| Big Dreams: | Sanchez | models; | labba a color de la color de l | Age 5-8 |
| Ada Lovelace | Vegara | biography; | https://www.waterstones.com/b | |
| | | maths; | ook/ada-lovelace/maria-isabel- | |
| | | computing | sanchez-vegara/zafouko- | |
| | | | <u>yamamoto/9781786030757</u> | |
| My Mummy | Kerrine | Female | ISBN 978-0993276903 | Age 5-7 |
| is an | Bryan & | engineers; | | |
| engineer | Jason Bryan | careers | https://www.hive.co.uk/Product | |
| _ | , | | /Kerrine-Bryan/My-Mummy-is- | |
| | | | an-Engineer/22719405 | |
| Operation | Malorie | Invention; | ISBN 978-0440863076 | Age 8+ |
| Gadgetman! | Blackman | forensic | | ATOS 4.1 |
| Gaagetman. | Biackman | science | https://www.fantasticfiction.co | 7(105 1.1 |
| | | concepts | m/b/malorie- | |
| | | concepts | blackman/operation- | |
| | | | The state of the s | |
| Dagia Dayraya | A m dua n | Fnainasu | gadgetman.htm | Λας Γ 7 |
| Rosie Revere | Andrea | Engineer; | ISBN 978-0419708459 | Age 5-7 |
| Engineer | Beaty | female | 1 | |
| | | engineers | https://www.hive.co.uk/Product | |
| | | | /Andrea-Beaty/Rosie-Revere- | |
| | | | Engineer/14987719 | |
| Structural | Tammy | Civil | ISBN 978-1-51576430 | ATOS 5.1 |
| Engineering | Laura Lynn | engineering | | Age 9-13 |
| Learn it! Try | Enz | | https://www.amazon.co.uk/Stru | |
| it! | | | ctural-Engineering-Dabble- | |
| | | | Science- | |
| | | | Builders/dp/1474740634 | |
| The 13- | Andy | Invention; | ISBN 978-1-4472-7978-5 | Age 6+ |
| Storey | Griffiths | general | | ATOS 3.9 |
| Treehouse | | science | https://www.fantasticfiction.co | 7.1.00 0.0 |
| i i ceriouse | | exploration | m/g/andy-griffiths/13-story- | |
| | | CAPIOLATION | treehouse.htm | |
| The Firework | Dhilin | Chamistry | | Ago 7 ! |
| The Firework | Philip | Chemistry | ISBN 978-0-440-86640-4 | Age 7+ |
| Maker's | Pullman | | | ATOS 5.3 |
| Daughter | | | https://www.fantasticfiction.co | |
| | | | m/p/philip- | |
| | | | pullman/fireworkmakers- | |
| | | | <u>daughter.htm</u> | |
| The Little | Hildegarde | Bridges | ISBN 978-0152045739 | Age 4-7 |
| Red | H Swift & | | | |
| Lighthouse & | Lynd Ward | | https://www.amazon.co.uk/Littl | |
| the Great | | | e-Lighthouse-Bridge-Reading- | |
| Gray Bridge | | | Rainbow/dp/0152045732/ | |
| J. G. Dilage | 1 | l . | | l . |

| The Three Billy Goats | Mara Alperin, | Bridges | ISBN 978-1848956858 | Age 3-8 ATOS ~3.0 |
|--------------------------|------------------|--------------------|---|----------------------|
| Gruff | Kate | | https://www.hive.co.uk/Product | 7.105 5.0 |
| | Pankhurst | | /Mara-Alperin/The-Three-Billy-Goats-Gruff/14794825 | |
| The Tin Snail | Cameron | Forces, air | ISBN 978-0552574037 | Age 8+ |
| | McAllister | resistance; | | |
| | | levers, | https://www.amazon.co.uk/Tin- | |
| | | pulleys; | Snail-Cameron- | |
| The T | 1 | invention | McAllister/dp/0552574031 | Λ Γ . |
| The True Story of the | Jon Scieszka | Materials | ISBN 978-0140540567 | Age 5+ ATOS 3.0 |
| 3 Little Pigs! | Scieszka | | https://www.fantasticfiction.co | A105 3.0 |
| J Little 1 193: | | | m/s/jon-scieszka/true-story-of- | |
| | | | three-little-pigs.htm | |
| We're going | Michael | Bridges (going | ISBN 978-1406363074 | ATOS 1.3 |
| on a bear | Rosen | over | | Age 4-7 |
| hunt! | | obstacles) | https://www.hive.co.uk/Product | |
| | | , | /Michael-Rosen/Were-Going-on- | |
| | | | <u>a-Bear-Hunt/24072412</u> | |
| You wouldn't | Roger | Water | ISBN 978-1910184080 | Age 9-13 |
| want to live | Canavan | purification | | |
| without | | | https://www.hive.co.uk/Product | |
| clean water! | | | /Roger-Canavan/You-Wouldnt- | |
| | | | <u>Want-To-Live-Without-Clean-</u> Water/17055073 | |
| You wouldn't | Alex Woolf | Computing; | ISBN 978-1912537051 | Age 8-12 |
| want to live | AICX WOOII | Maths | 1351 970 1312337031 | Agc 0 12 |
| without | | Tracino | https://www.amazon.co.uk/Wo | |
| coding! | | | uldnt-Want-Live-Without- | |
| _ | | | Coding/dp/0531193608 | |
| You wouldn't | Ian Graham | Electricity | ISBN 978-0531213070 | Age 8-11 |
| want to live | | | | |
| without | | | https://www.amazon.co.uk/Wo | |
| electricity! | | | uldnt-Want-Live-Without- | |
| You wouldn't | Anne | Forces | Electricity/dp/0606367101 | Age 8-11 |
| want to live | Rooney | Forces; Gravity | ISBN 978-1910706350 | Aye 0-11 |
| without | Rooney | Jiavity | https://www.amazon.co.uk/Wo | |
| gravity! | | | uldnt-Want-Live-Without- | |
| J/- | | | Gravity/dp/1910706353 | |
| You wouldn't | Anne | Maths | ISBN 978-1911242291 | Age 8-11 |
| want to live | Rooney | | | |
| without | | | https://www.amazon.co.uk/Wo | |
| numbers! | | | uldnt-Want-Live-Without- | |
| V | Tan Cost | Tables | Numbers/dp/1911242296 | A = 0 12 |
| You wouldn't | Ian Graham | Technology; | ISBN 978-1912537068 | Age 8-12 |
| want to live without | | computing | https://www.amazon.co.uk/Wo | |
| robots! | | | https://www.amazon.co.uk/Wo uldnt-Want-Live-Without- | |
| 100003: | | | Robots/dp/0531193616 | |
| You wouldn't | Ian Graham | Space | ISBN 978-1912537099 | Age 8-12 |
| want to live | | | |] |
| without | | | https://www.amazon.co.uk/Wo | |
| satellites! | | | uldnt-Want-Live-Without- | |
| | | | Satellites/dp/0531128164 | |

| You wouldn't want to live without Simple Machines! | Anne Rooney | Technology; Engineering; forces; levers, pulleys | ISBN 978-1912537082 https://www.brownsbfs.co.uk/P roduct/Rooney-Anne/You- wouldnt-want-to-live-without- simple | Age 8-12 |
|--|----------------|---|---|----------|
| | | | simple- machines/9781912537082 | |

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

https://rochesterbridgetrust.org.uk/learning-activities/learning-about-bridges/

Exploring Engineering Challenges

https://rochesterbridgetrust.org.uk/learning-activities/exploring-engineering-challenges/

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