

PGCE Secondary Maths Reading List

ARCHER R et al (2020) *Understanding lesson study for mathematics : a practical guide for improving teaching and learning* London, Routledge

BOALER, J.; Munson J & Williams C (2018) *Mindset mathematics: visualising and investigating big ideas, grade 5* San Francisco, CA : Jossey-Bass

BOALER, J. (2010). *The Elephant in the Classroom: Helping children learn and love Mathematics.* London, Souvenir Press

BURNS Et Al (2010) *AQA maths series* – Cheltenham : Nelson Thornes

CHAMBERS, P. (2013). *Teaching Mathematics (Developing as a Reflective Secondary Teacher).* Thousand Oaks, Sage Publications Ltd

COWEN P (2006) *Teaching mathematics ; a handbook for primary and secondary school teachers* London, Routledge

COWEY D et al (2003) *Foundations of advanced mathematics* London : Hodder & Stoughton

DEAN P (2018) *Teaching and Learning Mathematics* London, Routledge

FOSTER, Colin (2013). *The essential guide to secondary mathematics: Successful and enjoyable teaching and learning.* [online]. London, Routledge.

GOOS et al (2020) *Teaching Secondary School Mathematics Research and practice for the 21st Century* London, Routledge

JOHNSON T & CLOUGH T (2008) *IGCSE mathematics for Edexcel* London : Hodder Education

LEE, C. and WARD-PENNY, R. (Eds), (2019). *A Practical Guide to Teaching Mathematics in the Secondary School.* London, Routledge

RYAN J & Williams J (2007) *Children's mathematics 4-15: learning from errors and misconceptions* Maidenhead : McGraw-Hill/Open University Press

SIMMONS M (2017) *Effective teaching of mathematics* London; Routledge

SUTHERLAND R (2007) *Teaching for learning mathematics* Maidenhead : Open University Press

WATSON, Anne, JONES, Keith and PRATT, Dave (2013). *Key ideas in teaching mathematics: Research-based guidance for ages 9-19.* [online]. Oxford, Oxford University Press

Journals

- Journal for Research in Mathematics Education
- Mathematics Teacher
- Mathematics Teacher Educator.
- IEEE Journal
- Educational Studies in Mathematics

Government websites

National Centre for Excellence in Teaching Mathematics <http://www.ncetm.org.uk/>

National curriculum for Mathematics available online at:

<https://www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study>

Mathematics teachers have the opportunity to join two **professional associations**. These are:

- Association of Mathematics Teachers (ATM) - <http://www.atm.org.uk>
- Mathematics Association (MA) - <http://www.m-a.org.uk/>

Websites that are sources of well-crafted classroom activities

National STEM centre E-library of classroom resources

<https://www.stem.org.uk/audience/secondary-mathematics>

This is one of the places you can download the standards box and the only place you can download SMILE activities. It is becoming a superb one stop shop but it is not easy to navigate.

NRICH <http://nrich.maths.org/public/index.php>

It is difficult to over praise this site. Resources organised by mathematical topics

Teacher resources online (trol) <http://www.cleavebooks.co.uk/trol/index.htm>

Some nice stuff here on dominoes and darts as well as the BIG NUMBER LINE which should be on every classroom wall.

Bowland Maths <http://www.bowlandmaths.org.uk>

Here you will find a collection of free resources to support rich problem-solving activities in secondary school maths, including classroom material, assessment tasks and professional development resources