## PGCE primary mathematics (3-7 and 5-11) (Terms 1, 2 and 3)

NB: Content will be added as the seminars progress across the year.

This PGCE module is designed to develop your conceptual understanding of maths, which will support their growing subject knowledge. Imperative to this is making connections across different strands of maths, understanding the ways in which children learn and typically develop, and the pedagogical approaches that can facilitate children's deeper understanding, irrespective of age. Focusing on some of the big ideas in maths, linked to the module on Professional Studies, trainees will see the way in which approaches can be seamlessly integrated across the maths curriculum. This reading list covers the reading specific to each session, but has additional sections linked to topics that will be applicable when teaching.



Askew, Mike. 'Private Talk, Public Conversation'. Web. <http://mikeaskew.net/page3/page5/files/Privatetalkpublicconverse.pdf>.

---. 'Talk'. Transforming Primary Mathematics: Understanding Classroom Tasks, Tools, and Talk. Updated and revised edition. London: Routledge, Taylor & Francis Group, 2016. 147–155. Web.

<a href="https://www-taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www-taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www-taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www-taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www-taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www-taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/9781315667256-14/talk-mike-askew?context=ubx>">https://www.taylorfrancis-com.oxfordbrookes.idm.oclc.oxfordbrookes.idm.oclc.oxfordbrookes.idm.oxfordbrookes.idm.oxfordbrookes.idm.oxfordbrookes.idm

---. 'Variation Theory'. Transforming Primary Mathematics: Understanding Classroom Tasks, Tools, and Talk. Updated and revised edition. London: Routledge, Taylor & Francis Group, 2016. 75–88. Web.

<https://www-taylorfrancis-com.oxfordbrookes.idm.oclc.org/chapters/mono/10.4324/97813 15667256-8/variation-theory-mike-askew?context=ubx&refId=74d431d9-eed2-452da4cd-650dee1f825b>.

Barclay, Nancy. 'Valid and Valuable: Lower Attaining Pupils' Contributions to Mixed Attainment Mathematics in Primary Schools'. Research in Mathematics Education 23.2 (2021): 208–225. Web.

Bishop, Wayne. 'Why Do Americans Stink at Math? Some of the Answer'. Nonpartisan Education Review 10.1 (2014): n. pag. Web. <a href="https://nonpartisaneducation.org/Review/Reviews/v10n1.htm">https://nonpartisaneducation.org/Reviews/v10n1.htm</a>.

Boaler, Jo. 'Fluency Without Fear: Research Evidence on the Best Ways to Learn Math Facts'. 2015. Web.

<https://www.youcubed.org/wp-content/uploads/2017/09/Fluency-Without-Fear-1.28.15.pd f>.

Boaler, Jo, and Carol S. Dweck. Mathematical Mindsets: Unleashing Students' Potential Through Creative Math, Inspiring Messages and Innovative Teaching. Chichester: John Wiley & Sons, Incorporated, 2015. Print.

---. 'Rich Mathematical Tasks'. Mathematical Mindsets: Unleashing Students' Potential Through Creative Math, Inspiring Messages and Innovative Teaching. Chichester: John Wiley & Sons, Incorporated, 2015. 57–91. Web.

<a href="https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.producst.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.producst.com/lib/brookes/reader.action?docID=4444210&amp;ppg=75>">https://ebookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.

---. 'The Power of Mistakes and Struggle'. Mathematical Mindsets: Unleashing Students' Potential Through Creative Math, Inspiring Messages and Innovative Teaching. Chichester: John Wiley & Sons, Incorporated, 2015. 11–20. Web.

<a href="https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.producst.com/lib/brookes/reader.action?docID=4444210&amp;ppg=29>">https://ebookcentral.producst.com/lib/brookes/reader.action?docID=4444210&amp;ppg=20>">https://ebookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.com/lib/brookcentral.producst.

Briggs, Mary, and Sue Davis. Creative Teaching: Mathematics in the Primary Classroom. Second edition. London: Routledge/Taylor & Francis Group, 2015. Print.

Carr, Martha et al. 'Combined Fluency and Cognitive Strategies Instruction Improves Mathematics Achievement in Early Elementary School'. Contemporary Educational Psychology 36.4 (2011): 323–333. Web.

Clements, D H, and J Sarama. 'Rethinking Early Mathematics: What Is Research-Based Curriculum for Young Children?' Reconceptualizing Early Mathematics Learning. Ed. L D English and J T Mulligan. Dordrecht: Springer, 2013. 121–147. Web. <https://www.academia.edu/6921404/Clements\_D\_H\_and\_Sarama\_J\_2013\_Rethinking\_earl y\_mathematics\_What\_is\_research\_based\_curriculum\_for\_young\_children>.

Clements, Douglas H. 'Evaluating the Efficacy of a Learning Trajectory for Early Shape Composition'. American Educational Research Journal 56.6 (2019): n. pag. Web.

Clements, Douglas H. 'Subitizing: What Is It? Why Teach It?' Teaching children mathematics 5.7 (1999): 400–405. Web. <a href="https://contentstore.cla.co.uk/secure/link?id=c8e55348-16b9-ee11-ad36-0050f2f06092">https://contentstore.cla.co.uk/secure/link?id=c8e55348-16b9-ee11-ad36-0050f2f06092</a>.

Clements, Douglas, and Julie Sarama. 'Myths of Early Math'. Education Sciences 8.2 (2018): n. pag. Web.

Cockburn, Anne, and G. H. Littler. Mathematical Misconceptions: A Guide for Primary Teachers. London: SAGE, 2008. Print.

Cotton, Tony. 'Chapter 9 Geometry: Properties of Shapes, Position and Direction'. Understanding and Teaching: Primary Mathematics. Fourth edition. Abingdon: Routledge, 2021. 193–222. Print. Cox, Simon. 'Three Practical Approaches to Help Pupils Learn from Mathematical Mistakes'. EEF Blog. N.p., 25 Sept. 2020. Web.

<https://educationendowmentfoundation.org.uk/news/three-practical-approaches-to-help-pupils-learn-from-mathematical-mistakes>.

Cuoco, Al, Paul Goldenberg, and June Mark. 'Habits of Mind: An Organizing Principle for Mathematics Curricula.' Journal of Mathematical Behavior 15.4 (1996): 375–402. Print.

Department for Education. 'Development Matters: Non-Statutory Curriculum Guidance for the Early Years Foundation Stage'. 2023. Web. <a href="https://www.gov.uk/government/publications/development-matters--2">https://www.gov.uk/government/publications/development-matters--2</a>.

---. 'National Curriculum in England: Primary Curriculum'. N.p., 2015. Web. <https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curr iculum>.

---. 'Statutory Framework for the Early Years Foundation Stage: Setting the Standards for Learning, Development and Care for Children from Birth to Five'. 2023. Web. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment \_data/file/1170108/EYFS\_framework\_from\_September\_2023.pdf>.

Dignath-van Ewijk, Charlotte, and Greetje van der Werf. 'What Teachers Think about Self-Regulated Learning: Investigating Teacher Beliefs and Teacher Behavior of Enhancing Students' Self-Regulation'. Education Research International 2012 (2012): n. pag. Print.

Dowker, Ann. 'Computational Estimation Strategies of Professional Mathematicians'. Journal for Research in Mathematics Education 23.1 (1992): 45–55. Print.

Drews, Doreen, and Alice Hansen. Using Resources to Support Mathematical Thinking: Primary and Early Years. Exeter: Learning Matters, 2007. Web. <https://oxfordbrookes.idm.oclc.org/login?url=http://www.vlebooks.com/vleweb/product/o penreader?id=OxfBrookes&isbn=9781844457960&uid=^u>.

Early Childhood Maths Group. 'Spatial Reasoning'. N.p., n.d. Web. <a href="https://earlymaths.org/spatial-reasoning/">https://earlymaths.org/spatial-reasoning/</a>.

Early Years Coalition. 'Birth to 5 Matters: Non-Statutory Guidance for the Early Years Foundation Stage'. N.p., 2021. Web. <a href="https://birthto5matters.org.uk/">https://birthto5matters.org.uk/</a>.

Eather, Jenny. 'A Maths Dictionary for Kids: Plus Maths Charts'. N.p., n.d. Web. <a href="http://www.amathsdictionaryforkids.com/>">http://www.amathsdictionaryforkids.com/></a>.

Education Endowment Foundation. 'Improving Mathematics in Key Stages 2 and 3: Eight Recommendations to Improve Outcomes in Maths for 7–14 Year Olds'. N.p., 2017. Web. <a href="https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/maths-ks-2-3">https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/maths-ks-2-3</a>>.

---. 'Improving Mathematics in the Early Years and Key Stage 1: Five Recommendations to Support Practitioners in Developing the Maths Skills of 3–7 Year-Olds'. N.p., 2020. Web. <a href="https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/early-maths">https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/early-maths</a>.

---. 'Improving Mathematics in the Early Years and Key Stage 1: Summary of Recommendations'. 2020. Web.

<https://d2tic4wvo1iusb.cloudfront.net/production/eef-guidance-reports/early-maths/EEF\_ Maths\_EY\_KS1\_Summary\_of\_Recommendations.pdf?v=1701663272>.

Evans, Janet. 'Talking about Maths'. Education 3-13 30.1 66-71. Web.

---. 'Talking about Maths'. Education 3-13 30.1 66-71. Web.

Faulkner, Valerie, and Jennifer Ainslie. 'Subitising through the Years'. Australian Primary Mathematics Classroom 22.1 (2017): 28–36. Print.

Foster, Colin. 'Teaching Specific Tactics for Problem Solving'. Foster77 Mathematics Education: Colin Foster's mathematics education blog. N.p., 30 Mar. 2023. Web. <https://blog.foster77.co.uk/2023/03/teaching-specific-strategies-for.html>.

Francis, Becky et al. 'Attainment Grouping as Self-Fulfilling Prophesy? A Mixed Methods Exploration of Self Confidence and Set Level among Year 7 Students'. International Journal of Educational Research 86 (2017): 96–108. Web.

Fyfe, Emily R, Bethany Rittle-Johnson, and Marci S DeCaro. 'The Effects of Feedback during Exploratory Mathematics Problem Solving: Prior Knowledge Matters'. Journal of Educational Psychology 104.4 (2012): 1094–1108. Web.

<https://oxfordbrookes.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?dire ct=true&amp;db=pdh&amp;AN=2012-11775-001&amp;site=ehost-live>.

Gelman, Rochel, and C. R. Gallistel. 'The Counting Model'. The Child's Understanding of Number. Cambridge, Mass: Harvard University Press. 73–82. Web. <https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=3300437&amp;ppg= 90>.

Gilligan, Katie A. 'The Contribution of Spatial Ability to Mathematics Achievement in Middle Childhood'. Journal of Experimental Child Psychology 163 (2017): 107–125. Web.

Gray, Eddie. 'Compressing the Counting Process: Strength from the Flexible Interpretation of Symbols'. Teaching and Learning Early Number. Maidenhead: McGraw-Hill International (UK) Ltd, 2008. 82–94. Web.

<a href="https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=101>">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=100">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=10">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=10">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=10">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=10">https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=409780&amp;ppg=10">https://ebookcentral.producst.com/lib/brookes/reader.action?docID=409780&amp;ppg=10">https://ebookcentral.producst.com/lib/brookes/reader.action?docID=409780&amp;ppg=10"</additionality.com/lib/brookes/reader.action?docID=4009780&amp;ppg=10">https://ebookcentral.producst.com/lib/brookes/reader.action?docID=4009780&amp;ppg=10"</additionality.com/lib/brookes/reader.actionality.com/lib/brookes/reader.actionality.com/lib/brookes/reader.actionality.com/lib/brookes/reader.actionality.

Hansen, Alice. 'Counting and Understanding Number'. Primary Mathematics: Extending Knowledge in Practice. Exeter: Learning Matters, 2008. 27–44. Web. <https://ebookcentral.proquest.com/lib/brookes/reader.action?docID=686449&amp;ppg=2 7>.

Haylock, Derek, and Ralph Manning. Mathematics Explained for Primary Teachers (5-11). 6th edition. London: SAGE, 2019. Print.

Johnston-Wilder, Sue, and John Mason. Developing Thinking in Geometry. London: Open University in association with Paul Chapman Pub. Print.

Lai, Mun Yee, and Sarah Murray. 'Teaching with Procedural Variation: A Chinese Way of

Promoting Deep Understanding of Mathematics'. International Journal for Mathematics Teaching and Learning (2012): n. pag. Web. <a href="http://www.cimt.org.uk/journal/lai.pdf">http://www.cimt.org.uk/journal/lai.pdf</a>>.

'Learning and Teaching with Learning Trajectories'. N.p., n.d. Web. <https://www.learningtrajectories.org/>.

Lee, Ngan Hoe, and Boon Leong Jeremy Tan. 'The Role of Virtual Manipulatives on the CPA Approach'. The Electronic Journal of Mathematics and Technology 8.2 102–121. Web. <a href="https://repository.nie.edu.sg/bitstream/10497/18917/1/TEJMT-8-2-102.pdf">https://repository.nie.edu.sg/bitstream/10497/18917/1/TEJMT-8-2-102.pdf</a>>.

Lemov, Doug. Teach like a Champion 3.0: 63 Techniques That Put Students on the Path to College. Third edition. Hoboken, NJ: Jossey-Bass, a Wiley imprint, 2021. Print.

Loewenberg Ball, Deborah. 'Magical Hopes: Manipulatives and the Reform of Math Education'. American Educator: The Professional Journal of the American Federation of Teachers 16.1 (1992): 14–18. Web. <a href="https://www.aft.org/ae/summer1992/ball">https://www.aft.org/ae/summer1992/ball</a>.

Mansergh, Jill. 'Using a Counting Stick to Teach the 17x Table'. 2009. Web. <a href="https://www.youtube.com/watch?v=yXdHGBfoqfw">https://www.youtube.com/watch?v=yXdHGBfoqfw</a>.

Mason, John. 'Effective Questioning and Responding in the Mathematics Classroom'. 2010. Web.

<http://mcs.open.ac.uk/jhm3/Selected%20Publications/Effective%20Questioning%20&amp;%20Responding.pdf>.

MathsBot.com. 'Tools for Maths Teachers'. N.p., n.d. Web. <https://mathsbot.com/>.

Montague-Smith, Ann et al. Mathematics in Early Years Education. Fourth edition. Abingdon, Oxon: Routledge, 2018. Print.

---. 'Sorting, Matching and Handling Data'. Mathematics in Early Years Education. Fourth edition. Abingdon, Oxon: Routledge, 2018. 223–247. Web. <https://oxfordbrookes.idm.oclc.org/login?url=https://search.ebscohost.com/login.aspx?dir ect=true&amp;db=nlebk&amp;AN=1602227&amp;site=ehost-live&amp;ebv=EB&amp;ppi d=pp\_223>.

Moyer, Patricia S. 'Are We Having Fun Yet? How Teachers Use Manipulatives to Teach Mathematics'. Educational Studies in Mathematics : An International Journal 47.2 (2001): 175–197. Web.

Mulligan, Joanne T., and Michael C Mitchelmore. 'Young Children's Intuitive Models of Multiplication and Division.' Journal for Research in Mathematics Education 28.3 (1997): n. pag. Print.

National Centre for Excellence in the Teaching of Mathematics. 'Geometry: Properties of Shapes with Reasoning'. Web.

<https://www.ncetm.org.uk/media/ettef0hw/8\_progression\_map\_geometry\_properties\_of\_s hapes\_reasoningv2.pdf>.

---. 'Mathematics Glossary for Teachers in Key Stages 1 to 3'. 2014. Web.

<a href="https://www.ncetm.org.uk/media/hpihrj3s/national-curriculum-glossary.pdf">https://www.ncetm.org.uk/media/hpihrj3s/national-curriculum-glossary.pdf</a>.

---. 'Progression Maps for Key Stages 1 and 2'. N.p., n.d. Web.

<https://www.ncetm.org.uk/classroom-resources/progression-maps-for-key-stages-1-and-2 />.

---. 'What Is Unitising, and Why Is It Important?' N.p., 6 Nov. 2019. Web. <a href="https://www.ncetm.org.uk/features/what-is-unitising-and-why-is-it-important/">https://www.ncetm.org.uk/features/what-is-unitising-and-why-is-it-important/</a>.

National Centre for Excellence in the Teaching of Mathematics (NCETM). 'Statistics'. N.p., n.d. Web. <https://www.ncetm.org.uk/classroom-resources/cp-year-6-unit-8-statistics/>.

National Council of Teachers of Mathematics. 'Principles to Actions: Ensuring Mathematical Success for All'. N.p., n.d. Web. <a href="https://www.nctm.org/PtA/>">https://www.nctm.org/PtA/></a>.

---. 'Procedural Fluency in Mathematics'. N.p., 2014. Web. <https://www.nctm.org/Standards-and-Positions/Position-Statements/Procedural-Fluency-in -Mathematics/>.

---. 'Strategies for Formative Assessment'. N.p., n.d. Web. <https://www.nctm.org/Research-and-Advocacy/Research-Brief-and-Clips/Strategies-for-Fo rmative-Assessment/>.

NCETM. 'Measurement'. Web. <a href="https://www.ncetm.org.uk/media/14iciudq/7-progression-map-measurement.pdf">https://www.ncetm.org.uk/media/14iciudq/7-progression-map-measurement.pdf</a>.

---. 'Measures: Comparing Different Aspects Such as Length, Weight and Volume, as a Preliminary to Using Units to Compare Later'. N.p., n.d. Web. <a href="https://www.ncetm.org.uk/classroom-resources/ey-measures/">https://www.ncetm.org.uk/classroom-resources/ey-measures/</a>.

---. 'Primary Assessment Materials'. N.p., 2015. Web. <https://www.ncetm.org.uk/classroom-resources/assessment-materials-primary/>.

NRICH. 'Statistics'. University of Cambridge Faculty of Mathematics, n.d. Web. <a href="https://nrich.maths.org/12638">https://nrich.maths.org/12638</a>.

NRICH Primary Team. 'Reasoning: The Journey from Novice to Expert'. 2021. Web. <a href="https://nrich.maths.org/11336">https://nrich.maths.org/11336</a>>.

Nunes, Terezinha. 'Development of Maths Capabilities and Confidence in Primary School'. 2009. Web. <https://dera.ioe.ac.uk/id/eprint/11154/>.

Ofsted. 'Subject Report Series: Maths'. N.p., 2023. Web. <https://www.gov.uk/government/publications/subject-report-series-maths>.

Oughton, Rachel. 'Developing "Deep Mathematical Thinking" in Geometry with 3- and 4-Year-Olds: A Collaborative Study between Early Years Teachers and University-Based Mathematicians'. Mathematical Thinking and Learning (2022): n. pag. Web.

Resourceaholic. 'Topics in Depth Project'. N.p., n.d. Web. <https://www.resourceaholic.com/p/topics-in-depth.html>.

Sharifah Osman et al. 'Enhancing Students' Mathematical Problem-Solving Skills through Bar Model Visualisation Technique'. International Electronic Journal of Mathematics

Education 13.3 273–279. Web.

<https://www.iejme.com/download/enhancing-students-mathematical-problem-solving-skill s-through-bar-model-visualisation-technique-3919.pdf>.

---. 'Enhancing Students' Mathematical Problem-Solving Skills through Bar Model Visualisation Technique'. International Electronic Journal of Mathematics Education 13.3 273–279. Web.

<a href="https://www.iejme.com/download/enhancing-students-mathematical-problem-solving-skills-through-bar-model-visualisation-technique-3919.pdf">https://www.iejme.com/download/enhancing-students-mathematical-problem-solving-skills-through-bar-model-visualisation-technique-3919.pdf</a>

Siraj-Blatchford, Iram. 'Quality Teaching in the Early Years'. Early Childhood Education: Society and Culture. 2nd ed. Los Angeles: SAGE, 2009. 147–157. Web. <https://oxfordbrookes.on.worldcat.org/oclc/794488030>.

Skemp, Richard R. 'Relational Understanding and Instrumental Understanding'. Mathematics Teaching 77 (1976): 20–26. Web. <http://www.davidtall.com/skemp/pdfs/instrumental-relational.pdf>.

Swan, Malcolm. 'Dealing with Misconceptions in Mathematics'. Issues in Mathematics Teaching. London: RoutledgeFalmer. 147–165. Web. <https://contentstore.cla.co.uk/secure/link?id=fbac7b29-ba57-ee11-830d-0050f2f06092>.

Tabor, Pamela D. et al. Numeracy for All Learners: Teaching Mathematics to Students with Special Needs. Thousand Oaks, California: Corwin, 2021. Print.

Thomson, Julia, and Victoria Moore. 'Maths Vocabulary (NCETM Maths Podcast, Episode 71)'. 3 July 2023. Web. <a href="https://www.ncetm.org.uk/podcasts/maths-vocabulary/">https://www.ncetm.org.uk/podcasts/maths-vocabulary/</a>.

Wilkerson, Trena. 'Using Formative Assessment Effectively'. NCTM, 2022. Web. <a href="https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Trena-Wilkerson/Using-Formative-Assessment-Effectively/>">https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Trena-Wilkerson/Using-Formative-Assessment-Effectively/>">https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Trena-Wilkerson/Using-Formative-Assessment-Effectively/>">https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Trena-Wilkerson/Using-Formative-Assessment-Effectively/>">https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Trena-Wilkerson/Using-Formative-Assessment-Effectively/>">https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Trena-Wilkerson/Using-Formative-Assessment-Effectively/>">https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Trena-Wilkerson/Using-Formative-Assessment-Effectively/</a>