Developing understanding in science and mathematics FS/KS1 and KS2 (QTS020N013Y/QTS020N036Y) (Academic year 2024-2025)



[1]

Ainley, J. 1991. Is there any mathematics in measurement? Teaching and learning school mathematics: a reader. Hodder & Stoughton in association with The Open University. 69–76.

[2]

Alfinio Flores, Jeffrey Samson and H. Bahadir Yanik 2006. Quotient and Measurement Interpretations of Rational Numbers. Teaching Children Mathematics. 13, 1 (2006), 34–39.

[3]

Alfinio Flores, Jeffrey Samson and H. Bahadir Yanik 2006. Quotient and Measurement Interpretations of Rational Numbers. Teaching Children Mathematics. 13, 1 (2006), 34–39.

[4]

Allen, M. 2014. Misconceptions in primary science. Open University Press.

[5]

Allen, M. 2014. Misconceptions in primary science. Open University Press.

[6]

Allen, M. 2014. Misconceptions in primary science. Open University Press.

[7]

Bianchi, L. et al. 2011. Science beyond the classroom boundaries for 3-7 year olds. McGraw-Hill.

[8]

Bianchi, L. et al. 2011. Science beyond the classroom boundaries for 3-7 year olds. McGraw Hill/Open University Press.

[9]

Bianchi, L. et al. 2011. Science beyond the classroom boundaries for 7-11 year olds. McGraw-Hill Open University Press.

[10]

Bianchi, L. and Feasey, R. 2011. Science and technology beyond the classroom boundaries for 7-11 year olds. Open University Press.

[11]

Briggs, M. and Davis, S. 2008. Creative teaching mathematics in the early years and primary classroom. Routledge.

[12]

Brunton, P. and Thornton, L. 2010. Science in the early years: building firm foundations from birth to five. SAGE.

[13]

Brunton, P. and Thornton, L. 2010. Science in the early years: building firm foundations from birth to five. SAGE.

[14]

Brunton, P. and Thornton, L. 2010. Science in the early years: building firm foundations from birth to five. SAGE.

[15]

Cooke, V. and Howard, C. 2014. Practical ideas for teaching primary science. Critical Publishing.

[16]

Cooke, V. and Howard, C. 2014. Practical ideas for teaching primary science. Critical Publishing Ltd.

[17]

Cooke, V. and Howard, C. 2014. Practical ideas for teaching primary science. Critical Publishing Ltd.

[18]

Cotton, T. 2016. Understanding and teaching primary mathematics. Routledge.

[19]

Cotton, T. 2016. Understanding and teaching primary mathematics. Routledge.

[20]

Cotton, T. 2016. Understanding and teaching primary mathematics. Routledge.

[21]

Cotton, T. 2016. Understanding and teaching primary mathematics. Routledge.

[22]

Cramer, K. et al. 2015. 5 Indicators of Decimal Understandings. Teaching Children Mathematics. 22, 3 (2015). DOI:https://doi.org/https://roehamptonuniversity-on-worldcat-org.roe.idm.oclc.org/oclc/600 1099281.

[23]

Davies, D. 2011. Teaching science creatively. Routledge.

[24]

Devereux, Jane and Open University 2007. Science for primary and early years: developing subject knowledge. SAGE.

[25]

Fosnot, C.T. and Dolk, M.L.A.M. 2002. Young mathematicians at work: constructing fractions, decimals, and percents. Heinemann.

[26]

Frankland, M. 2017. Addressing special educational needs and disability in the curriculum: science. Routledge.

[27]

Frankland, M. 2017. Addressing special educational needs and disability in the curriculum: science. Routledge.

[28]

Fyfe, Emily R; 2015. Easy as ABCABC: Abstract Language Facilitates Performance on a Concrete Patterning Task. Child Development. 86, 3 (2015), 927–936.

[29]

Fyfe, Emily R.. Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN, US, efyfe@indiana.edu Matthews, Percival G.. Department of Educational Psychology, University of Wisconsin-Madison, Madison, WI, USAmsel, Eric. Department of Psychology, Weber State University, Ogden, UT, USMcEldoon, Katherine L.. Tennessee Department of Education, Nashville, TN, USMcNeil, Nicole M.. Department of Psychology, University of Notre Dame, Notre Dame, IN, US 2018. Assessing formal knowledge of math equivalence among algebra and pre-algebra students. Journal of Educational Psychology, 110, 1 (2018), 87–101.

[30]

Gifford, S. 2005. Teaching mathematics 3-5: developing learning in the foundation stage. Open University Press.

[31]

Gifford, S. 2005. Teaching mathematics 3-5: developing learning in the foundation stage. Open University Press.

[32]

Hansen, A. 2014. Measurement. Children's errors in mathematics. A. Hansen et al., eds. Learning Matters. 120–154.

[33]

Harlen, W. and Qualter, A. 2014. The teaching of science in primary schools. Routledge.

[34]

Harlen, W. and Qualter, A. 2014. The teaching of science in primary schools (electronic resource). Routledge.

[35]

Haylock, D. 2014. Algebraic Reasoning. Mathematics explained for primary teachers.

SAGE. 289-308.

[36]

Haylock, D. 2014. Algebraic Reasoning. Mathematics explained for primary teachers. SAGE. 289–308.

[37]

Haylock, D. 2014. Algebraic Reasoning. Mathematics explained for primary teachers. SAGE. 289–308.

[38]

Haylock, D. 2014. Algebraic Reasoning. Mathematics explained for primary teachers. SAGE. 289–308.

[39]

Holt Wilson, P. et al. 2012. Fair Shares, Matey, or Walk the Plank. Teaching Children Mathematics. 18, 8 (2012). DOI:https://doi.org/10.5951/teacchilmath.18.8.0482.

[40]

Howe, A. et al. 2017. Science 5-11: a guide for teachers. Routledge.

[41]

Howe, A. 2017. Science 5-11: a guide for teachers. David Fulton.

[42]

Johnston, J. 2014. Emergent science: teaching science from birth to 8. Routledge.

[43]

Johnston, J. 2014. Emergent science: teaching science from birth to 8. Routledge, Taylor & Francis Group.

[44]

Kelly, L. and Stead, D. 2013. Enhancing primary science: developing effective cross-curricular links. Open University Press.

[45]

Kelly, L. and Stead, D. 2013. Enhancing primary science: developing effective cross-curricular links. Open University Press.

[46]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[47]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[48]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[49]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[50]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[51]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[52]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[53]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[54]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[55]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[56]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[57]

Lamon, S.J. 2012. Teaching fractions and ratios for understanding: essential content knowledge and instructional strategies for teachers. Routledge.

[58]

Lester, F.K. 2007. Second handbook of research on mathematics teaching and learning: Vol.2. Information Age.

[59]

Lewis, R. et al. 2015. Unwrapping Students' Ideas about Fractions. Teaching Children Mathematics. 22, 3 (2015). DOI:https://doi.org/10.5951/teacchilmath.22.3.0158.

[60]

Ollerton, Mike 2014. DIFFERENTIATION IN MATHEMATICS CLASSROOMS. Mathematics Teaching. 240 (2014), 43–46.

[61]

Peacock, G. et al. 2014. Materials. Primary science: knowledge and understanding. Sage Publications Ltd. 88–105.

[62]

Poon, R. and Lewis, P. 2015. Unpacking the Division Interpretation of a Fraction. Teaching Children Mathematics. 22, 3 (2015). DOI:https://doi.org/10.5951/teacchilmath.22.3.0178.

[63]

Rutledge, G. N. 2010. Primary science: teaching the tricky bits (electronic resource). McGraw-Hill Open University Press.

[64]

Rutledge, N. 2010. Primary science: teaching the tricky bits. Open University Press/McGraw Hill.

[65]

Siegler, R.S. and Lortie-Forgues, H. 2017. Hard Lessons: Why Rational Number Arithmetic Is So Difficult for So Many People. Current Directions in Psychological Science. 26, 4 (Aug. 2017), 346–351. DOI:https://doi.org/10.1177/0963721417700129.

[66]

Turner, J. 2011. It's not fair - or is it? : a guide to developing children's ideas through primary science enquiry. Millgate House Publications.

[67]

Tzur, R. and Hunt, J. 2015. Iteration: Unit Fraction Knowledge and the French Fry Tasks. Teaching Children Mathematics. 22, 3 (2015). DOI:https://doi.org/10.5951/teacchilmath.22.3.0148.

[68]

Zhang, X. et al. 2015. Engaging Students with Multiple Models of Fractions. Teaching Children Mathematics. 22, 3 (2015). DOI:https://doi.org/10.5951/teacchilmath.22.3.0138.

[69]

2014. Can Kindergartners Do Fractions? Teaching Children Mathematics. 20, 6 (2014). DOI:https://doi.org/10.5951/teacchilmath.20.6.0354.

[70]

2017. How Can Students Learn Fraction (De)Composition? Teaching Children Mathematics. 24, 1 (2017). DOI:https://doi.org/10.5951/teacchilmath.24.1.0030.

[71]

2012. Pattern-Block Frenzy. Teaching Children Mathematics. 19, 2 (2012). DOI:https://doi.org/10.5951/teacchilmath.19.2.0116.

[72]

2012. Pattern-Block Frenzy. Teaching Children Mathematics. 19, 2 (2012). DOI:https://doi.org/10.5951/teacchilmath.19.2.0116.

[73]

2015. Toy Stories: Modeling Rates. Teaching Children Mathematics. 22, 2 (2015). DOI:https://doi.org/10.5951/teacchilmath.22.2.0076.

[74]

2015. Unpacking Referent Units in Fraction Operations. Teaching Children Mathematics. 22, 4 (2015). DOI:https://doi.org/10.5951/teacchilmath.22.4.0240.

[75]

2016. Using Representations of Fraction Multiplication. Teaching Children Mathematics. 22, 6 (2016). DOI:https://doi.org/10.5951/teacchilmath.22.6.0366.