

Engaging Books to Creatively Inspire a Love of Math

Address Learning Gaps for Kids Grades 3-8

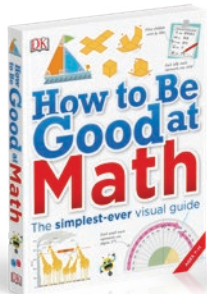


What Teachers Are Saying:

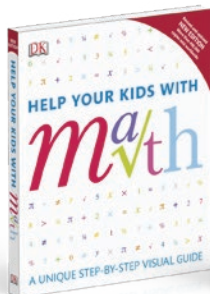
"They're so visually appealing and colorful."

"A lot of these books would be perfect for the school library or for the class math library, and for extra reading or project work . . . they give more context to the subject."

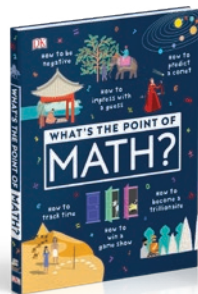
"They have condensed content that is easy to follow."



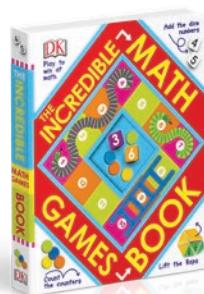
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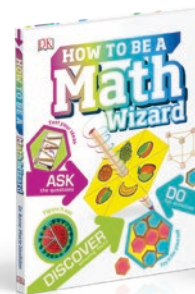
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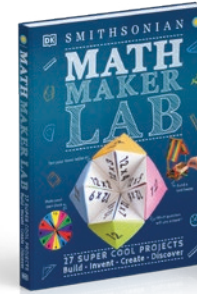
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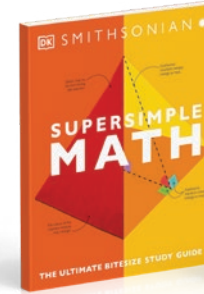
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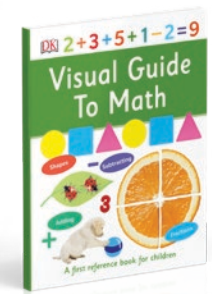
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Grade 3											
Domain	Standard	How to Be Good at Math	Help Your Kids with Math	What's the Point of Math?	The Incredible Math Games Book	Go Figure!	How to Be a Math Wizard	Math Maker Lab	Super Simple Math Math Dictionary	Visual Guide to Math	
Operations and Algebraic Thinking	<p>Represent and solve problems involving multiplication and division.</p> <p>Understand properties of multiplication and the relationship between multiplication and division.</p> <p>Multiply and divide within 100.</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p>	<p>3.OA.A.1: 98; 102 3.OA.A.2: 128–129 3.OA.A.3: 3.OA.A.4</p> <p>3.OA.B.5: 154–155 3.OA.B.6: 130; 131–133 (up to 10x10); 134</p> <p>3.OA.C.7: 104–106; 132–133 (only up to 10 times table — not 12)</p> <p>3.OA.D.8: 24 3.OA.D.9: 107; 135; 152</p>	<p>3.OA.A.1: 18; 19 3.OA.A.2: 22–23</p> <p>3.OA.D.8: 66–68; 70 3.OA.D.9: 19; 23</p>	3.G.A.1: 130–131			<p>3.OA.C.7: 13 (hand trick for 9x); 86 (high fives)</p> <p>3.OA.D.9: 87 (short division)</p>	<p>3.OA.A.1: 48 3.OA.A.2: 50–53 3.OA.A.3: 74–75</p> <p>3.OA.C.7: 49; 76–77</p>	<p>3.OA.C.7: 18–21; 21–25 (can be used for any operations)</p>		<p>3.OA.A.1: 50; 51; 56; 64 3.OA.A.3: 52–55</p> <p>3.OA.B.6: 57</p> <p>3.OA.C.7: 60–63</p> <p>3.OA.D.9: 58–59</p>
Number and Operations in Base 10	Use place value understanding and properties of operations to perform multi-digit arithmetic.	<p>3.NBTA.1: 26 (10 and 100) 3.NBTA.2: 83–85; 91–92; 94–97 3.NBTA.3: 108 (multiplying by 10); 109 1: 26</p>	<p>3.NBTA.2: 16–17 3.NBTA.3: 19</p>	3.NBTA.1: 88–89		3.NBTA.1: 86 (rounding off)	3.NBTA.3: 44–47		<p>3.NBTA.2: 12; 20 3.NBTA.3: 15</p>	3.NBTA.3: 66–67	
Number and Operations — Fractions	Develop understanding of fractions as numbers.	<p>3.NFA.1: 40 3.NFA.3: 44–46; 48–49</p>	<p>3.NFA.2: 48–49 3.NFA.3: 51</p>	3.NFA.1: 32	3.NFA.1: 9–10; 35–40		3.NFA.1: 13 (fractions part); 16–17	3.NFA.1: 38–41	3.NFA.1: 46	<p>3.NFA.1: 68–71 3.NFA.3: 72–73</p>	
Measurement and Data	<p>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</p> <p>Represent and interpret data.</p> <p>Geometric measurement: understand concepts of area and relate area to multiplication and to addition.</p> <p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</p>	<p>3.MDA.1: 192–193; 196 3.MDA.2: 178–179; 182–184</p> <p>3.MD.B.3: 282–291</p>	<p>3.MDA.1: 30–32 (not the 24-hour part) 3.MDA.2: 28</p> <p>3.MD.B.3: 202–203 (bar & pict); 206–207; 212–213; (but more basic for 3rd grade)</p> <p>3.MD.C.7: 133 (square and rectangle with whole number side lengths)</p>	3.MDA.1: 10–11; 56–59			<p>3.MDA.1: 80–81; 122–125</p> <p>3.MD.B.3: 110–111; 128–129</p>	3.MDA.2: 110–113	<p>3.MD.B.3: 226–229</p> <p>3.MD.C.7: 73 (area) 3.MD.D.8: 73 (perimeter)</p>	<p>3.MDA.1: 90 3.MDA.2: 74–85</p> <p>3.MD.B.3: 116–121</p>	
Geometry	Reason with shapes and their attributes.	3.G.A.1: 218	3.G.A.1: 130–131		3.G.A.2: 11–16	3.G.A.1: 56–57			3.G.A.1: 38	3.G.A.1: 105	
Mathematical Practices		5: 156–157		4: 6–7 5: 104		1, 2, 6, 7: 26–27	7: 30–33	5: 136–139			

Grade 4									
Domain	Standard	How to Be Good at Math	Help Your Kids with Math	What's the Point of Math?	Go Figure!	How to Be a Math Wizard	Math Maker Lab	Super Simple Math Math Dictionary	Visual Guide to Math
Operations and Algebraic Thinking	<p>Use the four operations with whole numbers to solve problems.</p> <p>Gain familiarity with factors and multiples.</p> <p>Generate and analyze patterns.</p>	<p>4.OA.A.1: 100 4.OA.A.2: 4.OA.A.3:</p> <p>4.OA.B.4: 28–35; 101</p> <p>4.OA.C.5: 14–17</p>	4.OA.B.4: 20; 26–27	<p>4.OA.B.4: 74–75</p> <p>4.OA.C.5: 66–67; 79</p>	4.OA.B.4: 40–41	4.OA.C.5: 32–33; 44–45	4.OA.C.5: 38–39; 104–105	4.OA.C.5: 56–61	4.OA.B.4: 23–25 4.OA.C.5: 265–266 (simple ones only and not called arithmetic or geometric)
Number and Operations in Base 10	<p>Generalize place value understanding for multi-digit whole numbers.</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic.</p>	<p>4.NBT.A.1 4.NBT.A.2: 22 4.NBT.A.3: 27</p> <p>4.NBT.B.4: 4.NBT.B.5: 110–11; 112–113 (called an area model in the US — not the grid method)</p>	4.NBT.B.5: 21 (the box method part — called area model in US)						
Number and Operations — Fractions	<p>Extend understanding of fraction equivalence and ordering.</p> <p>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>Understand decimal notation for fractions, and compare decimal fractions.</p>	<p>4.NF.A.1: 45; 46 4.NF.A.2: 50–51</p> <p>4.NF.B.3: 42–43</p> <p>4.NF.C.5: 75 (not exact, but best fit) 4.NF.C.7: 60</p>	<p>4.NF.A.2: 52</p> <p>4.NF.B.3: 50</p>	4.NF.C.3: 33	4.NF.C.6: 10–11			4.NF.A.2: 38 4.NF.B.3: 47 4.NF.C.6: 11	
Measurement and Data	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</p> <p>Represent and interpret data.</p> <p>Geometric measurement: understand concepts of angles and measure angles.</p>	<p>4.MD.A.1: 160–162; 188–191 (not converting between metric and imperial) 4.MD.A.2: 47, 93; 163; 197; 200–201 4.MD.A.3: 164–171; 176–177</p> <p>4.MD.C.5a: 230–233 4.MD.C.6: 238–239 4.MD.C.7: 234–235; 242–243</p>	<p>4.MD.C.5a: 84–85 4.MD.C.6: 83 (protractor)</p>	4.MD.C.5: 50–53		4.MD.A.1: 20–23; 86–87 4.MD.A.3: 22; 106–107	4.MD.A.2: 90–97 4.MD.B.4: 157 4.MD.C.5: 100–105 4.MD.C.6: 32–37	4.MD.A.1: 66; 68 (metric only) 4.MD.A.3: 74 (rectangle) 4.MD.C.6: 34 4.MD.C.7: 31	
Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	4.G.A.1: 204–211; 232–234 4.G.A.2: 212–217 4.G.A.3: 256–257	4.G.A.1: 86 4.G.A.2: 116–117; 134–135 4.G.A.3: 88 (just reflective part)	4.G.A.2: 42–43 4.G.A.3: 40–41	4.G.A.2: 54–55 4.G.A.3: 68–69	4.G.A.1: 90–93 4.G.A.3: 70–71	4.G.A.1: 150–156 4.G.A.3: 44–47	4.G.A.1: 30 4.G.A.2: 36 4.G.A.3: 35 (line, not rotation)	
Mathematical Practices		1: 176–177 7: 252–253	5: 83 7: 90–91				5: 32–37		4.G.A.1: 103 4.G.A.3: 113

Grade 5									
Domain	Standard	How to Be Good at Math	Help Your Kids with Math	What's the Point of Math?	Go Figure!	How to Be a Math Wizard	Math Maker Lab	Super Simple Math Math Dictionary	Visual Guide to Math
Operations and Algebraic Thinking	Analyze patterns and relationships.	5.OA.B.3: 248–249		5.OA.B.3: 70–72			5.OA.B.3: 26–31		
Number and Operations in Base 10	Understand the place value system. Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.A.1: 5.NBT.A.2: 108; 136 5.NBT.A.3: 5.NBT.A.4: 61 5.NBT.B.5: 114–125 5.NBT.B.6 5.NBT.B.7: 62–63; 87 (decimals part)	5.NBT.A.4: 71 (just the rounding part, not significant figures) 5.NBT.B.5: 21 5.NBT.B.7: 44–45	5.NBT.A.2: 77 (large numbers part)		5.NBT.A.3: 88–89; 126–127		5.NBT.A.2: 15; 115 5.NBT.A.4: 90 5.NBT.B.5: 21 (multiplication) 5.NBT.B.6: 21 (division)	
Number and Operations — Fractions	Use equivalent fractions as a strategy to add and subtract fractions. Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.A.1: 52–53 5.NF.B.4: 54–55	5.NF.A.1: 53 5.NF.B.4: 54					5.NF.A.1: 49 5.NF.B.3: 50 5.NF.B.4: 51	5.NF.B.5: 50
Measurement and Data	Convert like measurement units within a given measurement system. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	5.MD.A.1: 163; 185				5.MD.C.5: 68–69		5.MD.C.5b: 82	
Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems. Classify two-dimensional figures into categories based on their properties.	5.G.A.1: 248–249 5.G.B.3: 244–245		5.G.A.1: 60–61; 63		5.G.A.2: 112–115		5.G.B.3: 37	
Mathematical Practices					1: 48–49 7: 46–47				

Grade 6									
Domain	Standard	How to be good at Math	Help your kids with Math	What's the point of Math?	Go Figure!	How to be a Math Wizard	Math Maker Lab	Super Simple Math Math Dictionary	Visual Guide to Math
Ratios and Proportional Relationships	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.A.1: 70 6.RP.A.3c: 64–67; 70; 74–76	6.RP.A.1: 56–57 6.RP.A.3b: 29 (speed) 6.RP.A.3c: 60–61; 64–65	6.RP.A.3c: 28–29			6.RP.A.1: 106–109 6.RP.A.3b: 90–97 (also averages and angles) 6.RP.A.3c: 113	6.RP.A.1: 158 6.RP.A.2: 162 6.RP.A.3c: 54–57 6.RP.A.3d: 158	
The Number System	Apply and extend previous understandings of multiplication and division to divide fractions by fractions. Compute fluently with multi-digit numbers and find common factors and multiples. Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.A.1: 56–67 6.NS.B.2: 140–147 6.NS.B.4: 28 (common factors part); 29–31 6.NS.B.3: 150 6.NS.C.5: 187 6.NS.C.6: 18 (What are + and – numbers part); 250	6.NS.A.1: 55 6.NS.B.2: 24–25 6.NS.C.6: 34–35 (Number line part); 92	6.NS.C.6: 24–26; 62 (negative coordinates)		6.NS.C.1: 13 (neg numbers part)	6.NS.B.3: 125 6.NS.C.6: 48–49 (also symmetry)	6.NS.A.1: 52–53 6.NS.B.2: 18 6.NS.B.3: 13 6.NS.B.4: 26–27 6.NS.C.6: 144	
Expressions and Equations	Apply and extend previous understandings of arithmetic to algebraic expressions. Reason about and solve one-variable equations and inequalities.	6.EE.A.1: 36; 39 6.EE.A.2c: 308–309 6.EE.A.3: 302–303 6.EE.B.6: 304–305	6.EE.A.1: 36; 168 6.EE.A.2a: 172–173 6.EE.A.2c: 155 (LINK to 6.G.A.3); 157 (LINK to 6.G.A.4) 6.EE.B.8: 198		6.EE.A.1: 36–37			6.EE.A.1: 22; 95 6.EE.A.2a: 96 6.EE.A.2c: 28–29; 97; 109 6.EE.B.7: 130–131	
Geometry	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.A.1: 172–175 6.G.A.2: 180–181 6.G.A.3: 251 6.G.A.4: 228–229	6.G.A.1: 122–123; 132–133 6.G.A.2: 155 (rectangular prism only & LINK to 6.EE.A.2c) 6.G.A.4: 157 (rectangular prism only & LINK to 6.EE.A.2c)			6.G.A.4: 60–65	6.G.A.4: 114–117; 118–124	6.G.A.1: 74–75 6.G.A.4: 86 (surface area)	6.G.A.4: 108–109
Statistics and Probability	Develop understanding of statistical variability. Summarize and describe distributions.	6.SP.B.5a: 271 6.SP.B.5c: 276–281	6.SPA.2: 220 6.SPB.5: 214–215; 222–223	6.SPB.5c: 90–101		6.SPB.5c: 130–131		6.SPA.1: 223 6.SPB.4: 237–238; 241 6.SPB.5c: 231	
Mathematical practices		1: 174–175					1: 50–55		

Grade 8							
Domain	Standard	How to be good at Math	Help your kids with Math	What's the point of Math?	Go Figure!	Super Simple Math Math Dictionary	Visual Guide to Math
The Number System	Know that there are numbers that are not rational, and approximate them by rational numbers.		8.NS.A.2: 39	8.NS.A.1: 54–55	8.NS.A.1: 34–35	8.NS.A.1: 122	
Expressions and Equations	Work with radicals and integer exponents. Understand the connections between proportional relationships, lines, and linear equations. Analyze and solve linear equations and pairs of simultaneous linear equations.	8.EE.A.2: 38	8.EE.A.2: 37–38 8.EE.A.4: 42–43 (called Scientific notation in the US) 8.EE.B.6: 182–185 8.EE.C.8: 186–189	8.EE.A.1: 73		8.EE.A.1: 117–119 8.EE.A.2: 116 8.EE.A.4: 126–128 8.EE.B.5: 246; 250 8.EE.C.7b: 133 8.EE.C.8b: 134–135 8.EE.C.8c: 136; 152	
Functions	Define, evaluate, and compare functions. Use functions to model relationships between quantities.		8.F.A.3: 93 (equation of a line)			8.F.A.1: 252; 111 8.F.A.3: 146–147 8.F.B.5: 251	
Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software. Understand and apply the Pythagorean Theorem. Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.	8.G.A.3: 260–265	8.G.A.2: 120–121 8.G.A.3: 98–105 8.G.A.4: 125 8.G.A.5: 126 8.G.B.7: 128–129 8.G.C.9: 155 (sphere and cones); 157 (spheres and cones)	8.G.A.4: 44–45 8.G.A.5: 52 8.G.B.1: 121	8.G.A.5: 52–53 8.G.B.7: 52–53; 55 (Q4)	8.G.A.2: 188–189 8.G.A.3: 174–176; 178 8.G.A.4: 190 8.G.A.5: 32–33; 39; 41 8.G.B.6: 196 8.G.B.8: 148 8.G.C.9: 85; 87–88 (volume only)	8.G.A.3: 112
Statistics and Probability	Investigate patterns of association in bivariate data.		8.SPA.1: 226–227			8.SPA.1: 243–244 8.SPA.4: 219	