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| **Fluency with Multiplication and Division Facts** |
| Recalls multiplication and division facts to demonstrate and fluently recall facts to 100.8 × 7 = 56“I know my facts up to 10 × 10.” | Uses inverse operation to find multiplication and division facts. 56 ÷ 8 = ?8 × ? = 56“I can use multiplication to solve division problems.” | Applies estimation strategies to multiply and divide larger numbers. Gardeners planted 236 plants in rows of 5.Estimate how many rows were planted.236 ÷ 5 = ?“I know 100 ÷ 5 = 20, so 200 ÷ 5 = 40. Because 236 is close to 200, I estimate about 40 rows.” |
| **Observations/Documentation** |
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| **Fluency with Multiplication and Division Facts (cont’d)** |
| Uses mental math strategies and properties of operations to multiply and divide larger numbers. 5 × 47 = ?“I can decompose the numbers to make it easier to multiply: 5 × 40 = 200, 5 × 7 = 35, and 200 + 35 = 235.” | Applies properties of operations and partial products and connects to algorithms.16 × 12 = ?16 × 12 = (10 × 10) + (10 × 2) + (6 × 10) + (6 × 2) = 100 + 20 + 60 + 12 = 192 | Flexibly and fluently selects strategies and properties of operations to solve problems involving larger numbers.375 students are going on a field trip. Each bus holds 25 students. How many buses are needed?“I subtracted multiples of 25, then added.” |
| **Observations/Documentation** |
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| **Representing Equivalent Ratios and Rates** |
| Uses multiplicative relationships to represent and create ratios and rates (ratio table).It takes 6 cups of blueberries to make a pie. How many cups of blueberries will I need to make 5 pies?“I use a ratio table to see patterns to help me solve problems.” | Represents and records ratios and rates symbolically.6:1, 12:2, 18:3, 24:4, 30:5 | Represents and creates equivalent ratios and rates.The ratio of cups of blueberries to pies is 30:5. Identify equivalent ratios.“I multiply or divide each term by the same number. Equivalent ratios: | Flexibly represents and creates equivalent ratios and rates. A baker sells 2 pies for $15. How much did the baker make if 7 pies were sold?“7 is halfway between 6 and 8, so I find the number halfway between 45 and 60, which is $52.50.” |
| **Observations/Documentation** |
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