

Grade 5 Progress Report Rubric 2016-17

| Mathematics | December | March | June |
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| Multiplies and divides with automaticity | M: Student multiplies and divides within 100. Multiplication 19 to 27. Division 15 to 23. | M: Student multiplies and divides within 100. Multiplication 23 to 32. Division 21 to 31. | M: Student multiplies and divides within 100. Multiplication 26 to 36. Division 22 to 34. |
| | P: Student multiplies and divides within 100. Multiplication 13 to 18. Division 10 to 14. | P: Student multiplies and divides within 100. Multiplication 16 to 22. Division 14 to 20. | P: Student multiplies and divides within 100. Multiplication 19 to 25. Division 14 to 21. |
| Recognizes and applies the place value patterns of the base ten number system | M: Student consistently explains patterns in the number system and recognizes that a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 as much as the place to its left. Student consistently reads and writes decimals to the thousandths place in standard, word and expanded form. Student consistently rounds decimals to the nearest ten, one, tenth and hundredth. | M: Student consistently finds whole number quotients using models and strategies based on place value, the properties of operations and/or the relationship between multiplication and division. | M: Student consistently finds whole number quotients using models and strategies based on place value, the properties of operations and/or the relationship between multiplication and division. |
| | P: Student inconsistently explains patterns in the number system and recognizes that a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 as much as the place to its left. Student inconsistently reads and writes decimals to the thousandths place in standard, word and expanded form. Student uses models to round decimals to the nearest ten, one, tenth and hundredth. | P: Student inconsistently finds whole number quotients using models and strategies based on place value, the properties of operations, and the relationship between multiplication and division. | P: Student inconsistently finds whole number quotients using models and strategies based on place value, the properties of operations, and the relationship between multiplication and division. |

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| Performs operations with multi-digit whole numbers, decimals and fractions | M: Student consistently adds, subtracts, multiplies and divides whole numbers. Student consistently uses strategies based on place value, and properties of operations. | M: Student consistently adds, subtracts, multiplies and divides whole numbers. Student consistently understands that the properties of operations that apply to whole numbers also apply to decimals and fractions. | M: Student consistently adds, subtracts, multiplies and divides whole numbers. Student consistently understands that the properties of operations that apply to whole numbers also apply to decimals and fractions. |
| | P: Student adds, subtracts, multiplies and divides whole numbers using models. Student inconsistently uses strategies based on place value, and properties of operations. | P: Student adds, subtracts, multiplies and divides whole numbers using models. Student inconsistently understands that the properties of operations that apply to whole numbers also apply to decimals and fractions. | P: Student inconsistently adds, subtracts, multiplies and divides whole numbers. Student inconsistently understands that the properties of operations that apply to whole numbers also apply to decimals and fractions. |
| Creates, compares and computes with fractions and decimals | M: Student consistently adds and subtracts whole numbers, fractions and decimals. Student uses equivalent fractions as a strategy to add and subtract fractions with unlike denominators. Student consistently compares decimals to the thousandths place using $<$, $>$, $=$. | M: Student consistently multiplies and divides whole numbers, fractions and decimals. Student understands that a fraction is division of the numerator by the denominator. Student uses strategies to multiply a fraction by a whole number or a fraction by a fraction. | M: Student consistently multiplies and divides whole numbers, fractions and decimals. Student understands that a fraction is division of the numerator by the denominator. Student uses strategies to multiply a fraction by a whole number or a fraction by a fraction. Student consistently compares fractions and decimals using $<$, $>$, $=$. |
| | P: Student adds and subtracts fractions and decimals using models. Student uses models to add and subtract fractions with unlike denominators. Student compares decimals to the thousandths place using models or benchmarks. | P: Student multiplies and divides whole numbers, fractions and decimals using models. Student is beginning to understand that a fraction is division of the numerator by the denominator. Student uses models to multiply a fraction by a whole number or a fraction by a fraction. | P: Student multiplies and divides whole numbers, fractions and decimals using models. Student is beginning to understand that a fraction is division of the numerator by the denominator. Student uses models to multiply a fraction by a whole number or a fraction by a fraction. Student uses models to compare fractions and decimals using $<$, $>$, $=$. |
| Solves problems using measurement and volume | M: Student understands volume as an attribute of solid figures and is measured in cubic units. Student measures the volume of a solid figure by counting the cubes it takes to fill it with no gaps or overlaps. Student finds the volume of a | M: Student understands volume as an attribute of solid figures and is measured in cubic units. Student measures the volume of a solid figure by counting the cubes it takes to fill it with no gaps or overlaps. Student uses the formulas $V =$ | M: Student understands volume as an attribute of solid figures and is measured in cubic units. Student uses the formulas $V=l \times w \times h$ and $V = b \times h$ to find the volume of rectangular prisms. Student consistently converts among different |

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| Solves problems using measurement and volume (cont.) | rectangular prism by packing it with unit cubes, and shows that the result is the same as would be found by $V = l x w x h$ and $V = b x h$. Student consistently uses four operations to solve multi-step word problems involving measurement and measurement conversions. | $l x w x h$ and $V = b x h$ to find the volume of rectangular prisms. Student consistently uses four operations to solve multi-step word problems involving measurement and measurement conversions. | sized metric and customary units within a given measurement system. Student consistently uses four operations to solve multi-step word problems involving measurement and measurement conversions. |
| | P: Student does not understand volume as an attribute of solid figures and/or is measured in cubic units. Student inconsistently measures the volume of a solid figure by counting the cubes it takes to fill it with no gaps or overlaps. Student finds the volume of a rectangular prism by packing it with unit cubes, and inconsistently shows that the result is the same as would be found by $V = l x w x h$ and $V = b x h$. Student inconsistently uses four operations to solve multi-step word problems involving measurement and measurement conversions. | P: Student does not understand volume as an attribute of solid figures and/or is measured in cubic units. Student inconsistently measures the volume of a solid figure by counting the cubes it takes to fill it with no gaps or overlaps. Student finds the volume of a rectangular prism by packing it with unit cubes, and inconsistently shows that the result is the same as would be found by $V = l x w x h$ and $V = b x h$. Student inconsistently uses four operations to solve multi-step word problems involving measurement and measurement conversions. | P: Student uses models to represent volume as an attribute of solid figures and/or is measured in cubic units. Student inconsistently uses the formulas $V = l x w x h$ and $V = b x h$ to find the volume of rectangular prisms. Student inconsistently converts among different sized metric and customary units within a given measurement system. Student inconsistently uses four operations to solve multi-step word problems involving measurement and measurement conversions. |
| Classifies figures into categories based on attributes | N/A | N/A | M: Student consistently understands that two-dimensional figures can be classified into categories and subcategories. Student consistently locates, identifies, and graphs points on the coordinate plane to represent x - and y - coordinates. |
| | | | P: Student inconsistently understands that two-dimensional figures can be classified into categories and subcategories. Student inconsistently locates, identifies, and graphs points on the coordinate plane to represent x - and y - coordinates. |

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| Constructs viable arguments and justifies reasoning within problem solving | M: Student consistently defends reasoning using models to relate a strategy to a written method and explains why solutions are accurate. Student consistently estimates and solves word problems using benchmarks to determine reasonableness of answers. Student consistently questions the reasoning of others. | M: Student consistently defends reasoning using models to relate a strategy to a written method and explains why their solutions are accurate. Student consistently estimates and solves word problems using benchmarks to determine reasonableness of answers. Student consistently questions the reasoning of others. | M: Student consistently defends reasoning using models to relate a strategy to a written method and explains why their solutions are accurate. Student consistently estimates and solves word problems using benchmarks to determine reasonableness of answers. Student consistently questions the reasoning of others. |
| | P: Student inconsistently defends reasoning using models to relate a strategy to a written method and explains why solutions are accurate. Student inconsistently estimates and solves word problems using benchmarks to determine reasonableness of answers. Student inconsistently questions the reasoning of others. | P: Student inconsistently defends reasoning using models to relate a strategy to a written method and explain why solutions are accurate. Student consistently estimates and solves word problems using benchmarks to determine reasonableness of answers. Student inconsistently questions the reasoning of others. | P: Student inconsistently defends reasoning using models to relate a strategy to a written method and explain why solutions are accurate. Student consistently estimates and solves word problems using benchmarks to determine reasonableness of answers. Student inconsistently questions the reasoning of others. |

July 2016