Fayette R-III

Daly Elementary- Curriculum Guide for 3rd Grade Math

Fayette R-III Mission: To educate all students to be ethical, successful citizens.

The Elementary Math Learning Goals are based on the Missouri Learning Standards. The Missouri Learning Standards define the knowledge and skills students need to succeed in college, other postsecondary training, and careers. Students are challenged to develop critical thinking and creative problem solving skills while engaging in careers within Science, Technology, Engineering, and Mathematics (STEM) related fields. This document outlines what each student should know and be able to do by the end of 3rd Grade Math.

Course Description: In Grade 3 instructional time should focus on four critical areas: (1) developing an understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing an understanding of fractions; (3) developing an understanding of the structure of rectangular arrays and of area; and (4) solving number problems. In addition, students use place value understanding to add and subtract within 1000, and solve problems involving measurement data that they collect and analyze.

Course Rationale: Fayette R-III mathematics curriculum reflects the importance of mathematical literacy for all students. Mathematics is a fundamental skill used in all areas of life. Because students need to become lifelong mathematical learners to be successful in society, one goal of the mathematics department is to provide students with the necessary tools and opportunities to understand mathematical concepts. Real-world applications and situations will continually be incorporated. The curriculum is designed to be robust and relevant to the real world, reflecting the knowledge and skills the students need for success in future math courses, college, and careers. To meet these expectations, the curriculum is student-centered and will allow for exploration, discovery, conjecture, and application of mathematics.

| 3 rd Grade Math Student Learning Goals | MO Learning Standards |
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| 1- Addition and Subtraction Students can solve addition and subtraction problems within 1,000 using more than one strategy and choose an efficient strategy based on the numbers in the problem. | MA3.NBT.2 MA1, 1.5, 1.6, 3.4, 3.7 |
| 2- Multiplication Students can use grouping strategies to make groups and find totals in an efficient way when solving multiplication problems. | MA3.OA.3, MA3.OA.1 MA1, 1.5, 3.4 |
| 3- Multiplication Students can multiply 2-digit numbers using strategies based on place value and the properties of operations to solve problems. | MA3.OA.5, MA3.NBT.3, MA3.OA.9 MA1, 1.5, 3.4 |
| 4- Multiplication Students can demonstrate automaticity with multiplication facts through 12x12. | MA3.OA.7 MA1, 1.5, 1.6 |
| 5- Division Students can divide within 100, using strategies based on multiplication, place value, and properties of operations to solve problems. | MA3.OA.2, MA3.OA.7 MA1, 1.5, 3.4 |
| 6- Fractions Students can divide a whole into equal shares, identify the fraction or mixed number for each share, and locate a fraction or mixed number on a number line using reasoning. | MA3.G.2 MA5, 1.5, 1.6 |

| 7- Fractions Students can explain the equivalence of fractions and compare fractions by reasoning about their size using models or number lines for justification. | MA3.NF.1-3 MA5, 1.5, 3.4 |
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| 8- Geometry Students can create and complete two- and three-dimensional shapes and classify shapes into more than one category using appropriate geometric terms. | MA3.G.1 MA2, 1.6 |
| 9- Area Students can describe and use multiple strategies to find the area of a rectangle. | MA3.MD5-7 MA2, 1.6, 3.4 |
| 10- Perimeter Students can describe and use multiple strategies to measure the perimeter of polygons. | MA3.MD.8 MA2, 1.6, 3.4 |
| 11- Time Students can tell and write time to the nearest minute and solve addition and subtraction problems involving intervals of time. | MA3.MD.1 MA1, 1.5 |
| 12- Data Students can collect and organize data or use given data to create charts, tables, graphs, and line plots. Students can use graphs to ask and answer questions and draw conclusions. | MA3.MD.3-4 MA3, 1.8 |
| 13- Algebra Students can solve and represent problems using drawings, model and equations with a symbol for the unknown meaning. | MA3.OA.4, 8 MA4, 1.5, 1.6, 3.2, 3.4 |
| 14- Place Value Students demonstrate a basic understanding of place value through making appropriate rounding and estimation choices. | MA3.NBT.1 MA1, 1.6 |
| 15- Measurement Students can accurately measure the length of an object to the nearest ½ cm and inch. | MA3.MD.4 MA2, 1.4 |

Resources:

McGraw-Hill Everyday Math, 2012

Assessments:

Beginning, Mid and End of Year Assessments Unit Progress Checks

Board approved: March 18, 2015