DK Common Core State Standards Alignment for Mathematics

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Operations and algebraic thinking

- Represent and solve problems involving multiplication and division
- Understand properties of multiplication and the relationship between multiplication and division
- Multiply and divide within 100
- Communicative, distributive properties of multiplication and division
- Fluently multiply using fact strategies (doubles, squares, and number tables)
- Multiply with re-grouping
- Division with remainders
- Estimate products and quotients
- Solve problems involving the four operations and identify and explain patterns of arithmetic
- Choose operations in word problems
- Round to the nearest ten
- Identify and analyze patterns
- Addition fact families

Number and operations in base ten

- Use place value understanding and properties of operations to perform multi-digit arithmetic
- Write numbers from standard form in words
- Write numbers from words into standard form
- Convert from expanded form
- Find order
- Fluently add and subtract within 1000 using strategies based on place value, properties of operations or knowledge of the relationship between addition and subtraction

Number and operations - fractions

- Develop an understanding of fractions as numbers
- Understand fractions as the quantity formed when the whole is broken into parts
- Understand equivalents and their relationship; 1/2 =2/4 (with and without a model)
- Generate fractions by shading
- Fractions and decimal conversion
- Find order of fraction values
- Identify and write mixed numbers
- Adding and subtracting fractions with like denominators

Measurement and data

- Work with time and money
    - Add and subtract money amounts
    - Round money amounts
    - Count coins and bills to $100.00
    - Make change from $1.00
    - Solve problems involving money
- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects
- Convert customary units; cup, pint, quart, gallon
- Identify appropriate units of measurement
- Represent and interpret data
- Locate and identify coordinates on a grid (coordinate plane)
- Graph points x, y on a coordinate plane
- Read, create, coordinate and interpret line, bar, picture graphs and charts
- Understand concepts of area and relate area to multiplication and addition
- Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures

Geometry

- Reason with shapes and their attributes 2D and 3D
- Identify and name polygons
- Congruency
- Count and compare sides, edges, faces and vertices
- Find area made of square units

Mathematical practices

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Model with mathematics
- Use appropriate tools and strategies
- Attend to precision
- Look for and make use of structure

* indicates that the skill or standard is not mentioned in the CCSS for that grade level.