

IKM-Manning Curriculum
Mathematics Standards / Benchmarks / Indicators
November 2007

Standards:

The students will demonstrate understanding of number and operations

The students will demonstrate understanding of algebra

The students will demonstrate understanding of geometry and measurement

The students will demonstrate understanding of data analysis and probability

Course Benchmarks:

- 3.1.1 Understand numbers, ways of representing numbers, relationships among numbers, and number systems
- 3.1.2 Understand concepts of fractions
- 3.1.3 Demonstrate computational skills involving whole numbers
- 3.1.4 Understand and apply estimation strategies
- 3.1.5 Apply appropriate computational techniques in a problem solving situation
- 3.2.1 Understands patterns, functions, and number relationships
- 3.2.2 Apply concepts of algebra in a problem solving situation
- 3.3.1 Describe and compare the attributes of plane and solid geometric figures
- 3.3.2 Estimate and measure using standard and nonstandard units
- 3.4.1 Understand tables and graphs through problem solving (including simple predictions)

3rd Grade

3.1 Numbers and Operations

3.1.1 Understand numbers, ways of representing numbers, relationships among numbers, and number systems

- 3.1.1.A Read and write whole numbers to 10,000 and identify the place value for each digit
- 3.1.1.B Order and compare whole numbers to 10,000

3.1.2 Understand concepts of fractions (T)

- 3.1.2.A Know that a fraction means part of a whole or set of items
- 3.1.2.B Compare fractions by using drawings or concrete materials to show equivalency
- 3.1.2.C Add and subtract simple fractions

3.1.3 Demonstrate computational skills involving whole numbers (L)

- 3.1.3.A Find the sum or difference of two whole numbers between 0 and 10,000
- 3.1.3.B Practice multiplication facts

3.1.4 Understand and apply estimation strategies (C, H, T, MCGF, G)

- 3.1.4.A Round 2 and 3 digit numbers to the nearest ten and hundred

3.1.5 Apply appropriate computational techniques in a problem solving situation

- 3.1.5.A Solve simple problems involving multiplication of multi-digit numbers by one-digit numbers
- 3.1.5.B Solve problems using computation
- 3.1.5.C Solve problems involving addition, subtraction, and multiplication of money
- 3.1.5.D Select and use materials and strategies to solve problems (i.e. guess and check, make a chart, draw a picture, identify relevant information, estimate)
- 3.1.5.E Communicate reasoning used to solve problems

3.2 Algebra

3.2.1 Understands patterns, functions, and number relationships

- 3.2.1.A Solve problems involving a functional relationship
- 3.2.1.B Recognize and extend a linear pattern

3.2.2 Apply concepts of algebra in a problem solving situation

- 3.2.2.A Solve problems involving numeric equations or inequalities

3.3 Geometry and Measurement

3.3.1 Describe and compare the attributes of plane and solid geometric figures

- 3.3.1.A Name space and plane figures
- 3.3.1.B Identify right angles and determine whether other angles are greater or less than right angles
- 3.3.1.C Find the perimeter of a polygon

3.3.2 Estimate and measure using standard and nonstandard units

- 3.3.2.A Choose appropriate units (metric/U.S.) and tools to estimate, measure, and compare length, temperature, time, and money
- 3.3.2.B Carry out simple unit conversions within a system of measurement

3.4 Data Analysis and Probability

3.4.1 Understand tables and graphs through problem solving (including simple predictions) (L, H, T)

- 3.4.1.A Reads and interprets graphs or tables to answer questions

*Coding for Infusion Topics covered in curriculum:

Higher Order Thinking Skills (H), Vocational/Career Education (V), Global Education (G), Multi-Cultural/Gender Fair (MCGF), Learning Skills (L), Communication Skills (C), Technology (T)