

## Community Adult Literacy Benchmarks: Math - Number Sense

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
<b>Number Sense</b>	<p>-understand and apply the concepts of counting by 2s, 5s, and 10s, up to 100</p> <p>-solve 1 and 2-digit addition problems</p> <p>-solve 1 and 2-digit subtraction problems</p> <p>-use objects to represent commonly-used fractions. (e.g., 1/2 a chocolate bar)</p> <p>-select the appropriate operation to solve problems involving addition and subtraction of whole numbers</p>	<p>-understand and apply the concepts of counting by 25s, 50s, and 100s to 1000</p> <p>-solve 5-digit addition and subtraction problems</p> <p>-solve multiplication problems (3-digit by 1-digit numbers)</p> <p>-solve division problems (2-digit by 1-digit numbers)</p> <p>-represent and describe proper fractions concretely, pictorially, and with number symbols</p> <p>-understand the relationship between money and decimals</p> <p>-select the appropriate operation to solve problems using the four operations with whole numbers</p>	<p>-describe and represent whole numbers (up to 1,000,000)</p> <p>—————→</p> <p>-solve multiplication problems (4-digit by 2-digit numbers)</p> <p>-solve division problems (4-digit by 2-digit numbers)</p> <p>-add and subtract fractions with common denominators</p> <p>-describe and represent decimals (tenths, hundredths, thousandths)</p> <p>-add and subtract decimals</p> <p>-convert common fractions to decimals and vice versa</p> <p>-solve real-world problems involving decimals and fractions</p>	<p>-demonstrate an understanding of percent concretely, pictorially, and symbolically</p> <p>—————→</p> <p>—————→</p> <p>—————→</p> <p>-add and subtract fractions with unlike denominators</p> <p>-multiply and divide fractions with common denominators</p> <p>-multiply and divide decimals</p> <p>-convert common fractions to decimals and percents and vice versa</p> <p>-solve real-world problems using fractions and decimals</p>

## Community Adult Literacy Benchmarks: Math - Patterns and Relations

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
<b>Patterns and Relations</b>	-describe, create, reproduce, and extend a repeating pattern, using manipulatives, diagrams, and/or actions (pattern can be from personal experience - schedules, architecture, gardens, quilts)	<p>-describe, create, reproduce, and extend increasing and decreasing patterns, using manipulatives, diagrams, and/or actions</p> <p>-identify and describe patterns found in tables and charts. (e.g., multiplication tables)</p> <p>-solve addition and subtraction equations with one unknown variable (e.g., <math>6 + y = 12</math>)</p>	<p>-identify the pattern rule and make predictions</p> <p>-represent and describe patterns, using graphs and tables (e.g., a number plus one, plus two, etc.)</p> <p>-use simple one-step equations to solve problems with whole numbers (e.g., <math>4c = 12</math>)</p>	<p>→</p> <p>→</p> <p>→</p>

## Community Adult Literacy Benchmarks: Math - Space and Shape

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
<b>Space and Shape</b>	<p>-show awareness of how measurement is used in day-to-day activities</p> <p>-estimate familiar quantities (e.g., length, volume, weight, time, temperature)</p> <p>-compare familiar quantities (e.g., length, volume, weight, time, temperature) using informal comparative language and methods. (e.g., big, bigger, biggest)</p> <p>-recognize, name, and describe common 2-D shapes. (e.g., square, circle, rectangle)</p>	<p>-measure length, perimeter, area, volume, weight, time, and temperature using common standard units</p> <p>-name, describe, compare, and classify a variety of 2D shapes and 3D objects (e.g., polygons, prisms, pyramids)</p>	<p>-measure length, perimeter, area, volume, weight, time, and temperature with precision using common standard units</p> <p>-use formulas to measure the perimeter and area of rectangles and squares</p> <p>-construct 2D shapes and 3D objects</p>	<p>-make common conversions (e.g., miles to kilometers, pounds to kilograms)</p> <p>-use formulas to calculate the area and perimeter of parallelograms, triangles, circles, and quadrilaterals</p> <p>-construct 2D shapes and 3D objects that meet certain criteria</p>

## Community Adult Literacy Benchmarks: Math - Statistics and Probability

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
<b>Statistics and Probability</b>		<p>-collect, organize and record data about self and others, or familiar subjects (e.g., charts, webs, Venn diagram)</p> <p>-describe the likelihood of an outcome, using probability vocabulary such as impossible, possible, against the odds</p>	<p>-choose and use an appropriate method for collecting data to answer a question. (e.g., questionnaire, experiment, observation)</p> <p>-create a bar graph to represent data</p>	<p>-choose and use the most appropriate method to display and analyze data (e.g., circle graphs, scatter plots, stem and leaf plots)</p>