

Community Adult Literacy Benchmarks: Math - Level 1 Checklist

PROCESS	BENCHMARK	BASIC	PROFICIENT	STRONG
Number Sense	<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>			
Patterns and Relations	<p>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>			
Space and Shape	<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>			
Statistics and Probability				

Community Adult Literacy Benchmarks: Math - Level 2 Checklist

PROCESS	BENCHMARK	BASIC	PROFICIENT	STRONG
Number Sense	<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>			
Patterns and Relations	<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., $6 + y = 12$)</p>			
Space and Shape	<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>			
Statistics and Probability	<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>			

Community Adult Literacy Benchmarks: Math - Level 3 Checklist

PROCESS	BENCHMARK	BASIC	PROFICIENT	STRONG
Number Sense	<p>Describe and represent whole numbers (up to 1,000,000)</p> <p>Solve 5-digit addition and subtraction problems</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>			
Patterns and Relations	<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., $4c = 12$)</p>			
Space and Shape	<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>			
Statistics and Probability	<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>			

Community Adult Literacy Benchmarks: Math - Level 4 Checklist

PROCESS	BENCHMARK	BASIC	PROFICIENT	STRONG
Number Sense	<p>Demonstrate an understanding of percent concretely, pictorially, and symbolically</p> <p>Solve 5-digit addition and subtraction problems</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 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>			
Patterns and Relations	<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., $4c = 12$)</p>			
Space and Shape	<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>			
Statistics and Probability	<p>Choose and use the most appropriate method to display and analyze data (e.g., circle graphs, scatter plots, stem and leaf plots)</p>			