

**Third Grade  
Math Frameworks Correlation**

**Mathematics and Economics Connections for Life: 3-5**

| ↓ Frameworks/Lessons ⇒  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|
| <b>NUMBERS AND OPERATIONS</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Standard 1: Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Whole Numbers</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>NO.1.3.1</b> Recognize equivalent representations for the same whole number and generate them by composing and decomposing numbers   | X |   |   | X |   |   |   |   |   |    | X  |    |
| <b>Rational Numbers</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>NO.1.3.4</b> Represent fractions (halves, thirds, fourths, sixths and eighths) using words, numerals and physical models   | X | X |   |   |   |   |   |   | X | X  |    |    |
| <b>NO.1.3.5</b> Utilize models to recognize that the size of the whole determines the size of the fraction depending on the original quantity   | X |   |   |   |   |   |   |   |   | X  |    |    |
| <b>NO.1.3.6</b> Use the place-value structure of the base-ten number system and be able to represent and compare decimals to hundredths in money (using models, illustration, symbols, expanded notation and problem solving) | X |   |   | X |   |   |   |   |   |    | X  |    |
| <b>NO.1.3.7</b> Write a fraction that is equivalent to a given fraction with the use of models  |   |   |   |   |   |   |   |   |   | X  |    |    |
| <b>Standard 2: Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Number Theory</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>NO.2.3.2</b> Apply number theory: determine if a 3-digit number is even or odd; use the terms multiple, factor, product and quotient in an appropriate context   |   |   |   |   | X |   |   |   |   |    |    |    |

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| <b>Whole Number Operations</b>   |          |   |          |          |          |          |          |   |          |          |          |          |
| <b>NO.2.3.3</b> Use conventional mathematical symbols to write equations for contextual problems involving multiplication  |          |   |          | <b>X</b> | <b>X</b> | <b>X</b> |          |   | <b>X</b> | <b>X</b> |          |          |
| <b>NO.2.3.4</b> Model, represent and explain division as measurement and partitive division including equal groups, related rates, price, rectangular arrays (area model), combinations and multiplicative comparison  |          |   | <b>X</b> | <b>X</b> | <b>X</b> |          |          |   | <b>X</b> | <b>X</b> |          | <b>X</b> |
| <b>Standard 3: Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates</b>  |          |   |          |          |          |          |          |   |          |          |          |          |
| <b>Computational Fluency-Addition and Subtraction</b>  |          |   |          |          |          |          |          |   |          |          |          |          |
| <b>NO.3.3.1</b> Develop, with and without appropriate technology, computational fluency, in multi-digit addition and subtraction through 999 using contextual problems: strategies for adding and subtracting numbers; estimation of sums and differences in appropriate situation; relationships between operations   | <b>X</b> |   | <b>X</b> | <b>X</b> | <b>X</b> | <b>X</b> |          |   |          |          | <b>X</b> | <b>X</b> |
| <b>Computational Fluency-Multiplication and Division</b>   |          |   |          |          |          |          |          |   |          |          |          |          |
| <b>NO.3.3.2</b> Develop, with and without appropriate technology, fluency with basic number combinations for multiplication and division facts   |          |   | <b>X</b> | <b>X</b> | <b>X</b> | <b>X</b> | <b>X</b> |   |          | <b>X</b> |          |          |
| <b>NO.3.3.3</b> Develop, with and without appropriate technology, computational fluency in multiplication and division up to two-digit by one-digit numbers using two-digit by one-digit number contextual problems: strategies for multiplying and dividing numbers; performance of operations in more than one way, estimation of products and quotients in appropriate situations; relationships between operations |          |   | <b>X</b> | <b>X</b> | <b>X</b> |          |          |   |          | <b>X</b> |          |          |

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| <b>Application of Computation</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>NO.3.3.4</b> Solve simple problems using one operation involving addition and subtraction using a variety of methods and tools   | X | X | X | X | X | X | X | X | X | X  | X  | X  |
| <b>Estimation</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>NO.3.3.5</b> Use estimation strategies to solve problems and judge the reasonableness of the answer  |   |   | X | X |   |   |   |   |   |    |    |    |
| <b>ALGEBRA</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Standard 4: Patterns, Relations and Functions: Students shall recognize, describe and develop patterns, relations and functions</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Recognize, Describe and Develop Patterns</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>A.4.3.2</b> Relate skip-counting patterns to multiplication  |   |   |   |   | X |   |   |   |   |    |    |    |
| <b>A.4.3.4</b> Use repeating and growing numeric or geometric patterns to solve problems  |   |   |   |   | X |   |   |   |   |    |    |    |
| <b>Standard 5: Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Expressions, Equations and Inequalities</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>A.5.3.1</b> Select and/or write number sentences (equations) to find the unknown in problem-solving contexts involving two-digit times one-digit multiplication using appropriate labels |   |   |   | X | X |   |   |   |   |    |    |    |
| <b>A.5.3.2</b> Express mathematical relationships using equalities and inequalities(>, <, =, ⊕)   |   |   |   |   |   | X |   |   |   |    |    |    |
| <b>A.5.3.3</b> Use a symbol to represent an unknown quantity in a number sentence involving contextual situations and find the value  |   |   |   |   |   | X |   |   |   |    | X  |    |
| <b>Standard 6: Algebraic Models: Students shall develop and apply mathematical models to represent and understand quantitative relationships</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Algebraic Models and Relationships</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>A.6.3.1</b> Complete a chart or table to organize given information and to understand relationships and explain the results  |   | X | X | X | X | X |   | X | X | X  | X  | X  |

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| <b>Standard 7: Analysis of Change: Students shall analyze change in various contexts</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Analyze Change</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>A.7.3.1</b> Identify the change over time  |   |   |   |   | X | X |   |   | X |    | X  |    |
| <b>GEOMETRY</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Standard 8: Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships</b> |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Characteristics and Properties - Three Dimensional</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>G.8.3.1</b> Compare, contrast and build 3-D solids by investigating the number of faces, edges, and vertices on models   |   |   |   |   |   |   | X |   |   |    |    |    |
| <b>Standard 11: Visualization and Geometric Models: Students shall use visualization, spatial reasoning and geometric modeling</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Spatial Visualization and Models</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>G.11.3.2</b> Determine which new figure will be formed by combining and subdividing models of existing figures   |   |   |   |   |   |   | X |   |   |    |    |    |
| <b>MEASUREMENT</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Standard 12: Physical Attributes: Students shall use attributes of measurement to describe and compare mathematical and real-world objects</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Time: Clock</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>M.12.3.2</b> Recognize that 60 minutes equals 1 hour and that a day is divided into A.M. and P.M.  |   |   |   |   |   |   |   |   | X |    |    |    |
| <b>Temperature</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>M.12.3.3</b> Distinguish the temperature in contextual problems using the Fahrenheit scale on a thermometer  |   |   | X |   |   |   |   |   |   |    |    |    |
| <b>Standard 13: Systems of Measurement: Students shall identify and use units, systems and processes of measurement</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Clock</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>M.13.3.2</b> Tell time to the nearest 1-minute intervals   |   |   |   |   |   |   |   |   | X |    |    |    |
| <b>M.13.3.3</b> Express time to the half hour and quarter hour using the terms half-past, quarter after, quarter-until  |   |   |   |   |   |   |   |   | X |    |    |    |

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| <b>Elapsed Time</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>M.13.3.4</b> Determine elapsed time in contextual situations to five-minute intervals: end time unknown; elapsed time unknown  |   |   |   |   | X |   |   |   | X |    |    |    |
| <b>Money</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>M.13.3.5</b> Determine the value of money up to \$10   |   |   |   |   |   | X |   |   |   |    |    |    |
| <b>M.13.3.6</b> Apply money concepts in contextual situations up to \$10.00   | X |   |   |   |   | X |   |   |   |    |    |    |
| <b>Temperature</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>M13.3.7</b> Read temperatures on Fahrenheit and Celsius scales in intervals of two and five  |   |   | X |   |   |   |   |   |   |    |    |    |
| <b>DATA ANALYSIS AND PROBABILITY</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Standard 14: Data Representation: Students shall formulate questions that can be addressed with data and collect, organize and display relevant data to answer them</b>                    |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Collect, Organize and Display Data</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>DAP.14.3.1</b> Design a survey question after being given a topic and collect, organize, display and describe simple data using frequency tables or line plots, pictographs and bar graphs |   | X |   |   |   |   |   | X |   |    |    |    |
| <b>Inferences and Predictions</b>   |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>DAP 16.3.1</b> Make predictions for a given set of data  | X | X | X | X | X | X |   | X | X |    | X  |    |
| <b>Standard 17: Probability: Students shall understand and apply basic concepts of probability</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>Probability</b>  |   |   |   |   |   |   |   |   |   |    |    |    |
| <b>DAP.17.3.3</b> Use physical models, pictures and organized lists to find combinations of two sets of objects   |   |   |   |   | X |   |   |   |   |    |    |    |