



Applied Mathematics		
Level #/ Lesson #	Learning Objective	Description
Level 1 Lesson 2	Recognizing Basic Math Symbols	Recognize common mathematical symbols and be able to describe their functions; use a multiplication table; identify and define common currency symbols
Level 1 Lesson 3	Telling Time	Recognize and read time from traditional analog and digital clock faces; know the parts of a clock; understand that the same time can be expressed in various ways
Level 1 Lesson 4	Reading Simple Meters	Understand how measurements are represented on various tools used to measure different quantities; read measurements from a few of the most common types of measurement tools
Level 1 Lesson 5	Recognizing Whole Number Place Values	Recognize and define whole numbers; understand and quantify the difference in value assigned to a digit based on its place in a number
Level 1 Lesson 6	Reading and Expressing Numbers	Read and write whole numbers as words; recognize numbers expressed as words and connect them with the numeral form; extend understanding of place value to millions and billions
Level 1 Lesson 7	Recognizing Place Values in Money	Read and write amounts of money as words; recognize amounts of money expressed as words and connect them with standard money notations; understand that place value can also apply to quantities less than one whole
Level 1 Lesson 8	Counting Money	Count money; represent quantities of money using appropriate notation; increase familiarity with decimal place value
Level 1 Lesson 9	Reading and Writing Fractions	Understand the concept of a fraction as a part of a whole; read and write the correct fraction associated with a given part of a whole; know vocabulary associated with fractions; make associations between fractions and money
Level 2 Lesson 2	Using Your Calculator	Recognize general-use and calculator-specific mathematical symbols on a calculator; use a calculator to perform mathematical computations
Level 2 Lesson 3	Converting Dollars and Cents	Convert amounts of money between dollar (decimal) and cent (whole number) notation
Level 2 Lesson 4	Rounding Numbers	Round whole numbers, decimals, and amounts of money to a specified place



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Level 2 Lesson 5	Estimating Practical Problems	Estimate results of operations with whole numbers and decimals by rounding; use estimation in real-world situations to obtain an approximate answer quickly; check answers to problems using estimation; know when estimation will not be helpful to answer a question
Level 2 Lesson 6	Converting Basic Time Units	Convert units in measurements of time intervals; know conversion factors between different units of time
Level 2 Lesson 7	Recognizing Relevant Information	Discern necessary information from extraneous information in statements of word problems
Level 2 Lesson 8	Operations to Solve Simple Word Problems	Analyze word problems to determine the question to be answered and the information needed to answer the question; determine what operation(s) will be needed to solve the problem
Level 3 Lesson 2	Introduction to Problem Solving	Use estimation to determine the magnitude of a reasonable answer to a word problem; read to determine the question that needs to be answered; choose the appropriate operation(s) to solve the problem; carry out the problem-solving process and determine an answer
Level 3 Lesson 3	Addition and Subtraction of Monetary Units	Add and subtract amounts of money
Level 3 Lesson 4	Multiplication of Monetary Units	Multiply amounts of money by whole numbers and decimals; round products to the nearest hundredth when necessary
Level 3 Lesson 5	Division of Monetary Units	Divide amounts of money by whole numbers and decimals; round quotients to the nearest hundredth
Level 3 Lesson 6	Practice Session with Practical Problems	Solve word problems using a process that includes defining the problem, deciding on a plan, carrying out the plan, and examining the outcome
Level 3 Lesson 7	Addition & Subtraction of Signed Numbers	Understand the concept of negative numbers; add and subtract with positive and negative integers; enter negative integers on a calculator and use the calculator to help solve arithmetic problems involving integers; solve word problems involving arithmetic with integers
Level 3 Lesson 8	Conversions Involving Whole Numbers, Fractions, Decimals and Percentages	Convert between fractions, decimals, and percents; reduce fractions; solve word problems involving conversions between fractions, decimals, and percents



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Level 4 Lesson 3	Multiplication of Fractions	Multiply fractions by whole numbers and by other fractions; convert between improper fractions and mixed numbers; cross-cancel common factors in fractions to simplify multiplication; solve word problems involving multiplying fractions
Level 4 Lesson 4	Unit Conversions within a System	Convert measurements within the English system of units; perform dimensional analysis to assist in conversion of measurements; convert measurements within the metric system of units; solve word problems involving conversions of measurements
Level 4 Lesson 5	Multistep Problems	Solve multi-step word problems involving the four operations with whole numbers and money
Level 4 Lesson 6	Averages, Rates, Ratios, and Proportions	Find the average of a group of whole numbers; express the relationship between two quantities as a ratio or a rate; solve for an unknown quantity by using proportions
Level 4 Lesson 7	Percentages	Calculate a percentage of a number; apply percentages to real-world situations
Level 4 Lesson 8	Addition of Common Fractions, Decimals and Percentages	Add fractions and mixed numbers with like denominators; convert between fractions and decimals; solve word problems involving adding fractions, mixed numbers, percents, and decimals
Level 4 Lesson 9	Multiplying and Dividing with Negative Numbers	Review addition and subtraction of integers; extend rules for addition and subtraction with negative numbers to decimals; multiply and divide with negative integers and decimals
Level 5 Lesson 2	Unit Measurements	Know approximate sizes of metric units; choose appropriate metric units for situations; convert measurements of length, weight, volume, and area within systems; convert temperatures between the Celsius and Fahrenheit scales
Level 5 Lesson 3	Perimeter and Area	Find perimeters and areas of rectangles and triangles
Level 5 Lesson 4	Circumference and Area of Circles	Find circumferences and areas of circles; gain familiarity with the parts of a circle
Level 5 Lesson 5	Solving Percent Problems	Review finding percentages of numbers; solve equations to find a number given a percentage of that number, or to find the percent being taken
Level 5 Lesson 6	Solving Problems with Rates & Proportions	Review solving proportions; solve problems involving rates and ratios



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Level 5 Lesson 7	Application of Word Problems	Use mathematical skills to fill out forms showing financial information; solve complex word problems to evaluate available choices within a situation; discern needed information from extraneous information when solving word problems
Level 6 Lesson 3	Rearranging the Formulas for Perimeter and Area	Solve for a missing dimension in perimeter problems and area problems; rearrange an equation by adding, subtracting, multiplying, or dividing the same number on both sides of the equation
Level 6 Lesson 5	Solving Multiple Rate Problems	Review solving basic rate problems; solve problems that involve rates that change over time
Level 6 Lesson 6	Introduction to Volume	Find the volumes of rectangular solids given edge dimensions
Level 6 Lesson 7	Applications of Multistep Word Problems	Solve word problems that require several steps to determine an answer; distinguish between relevant and extraneous information when solving word problems; solve complex word problems to evaluate available choices within a situation; check answers to determine if mistakes may have been made during the solution process
Level 7 Lesson 2	Solving Problems for Percent of Change	Calculate the percent change of a quantity; set up and solve simple algebraic equations to assist in calculating percent change; practice determining extraneous information in the statement of a problem
Level 7 Lesson 3	Proportions	Review finding a missing quantity in a proportion; solve simple and complex word problems involving proportions
Level 7 Lesson 4	Perimeter, Area and Volume	Review formulas for perimeters and areas of flat shapes and volumes of rectangular solids; use formulas to calculate volumes of cylinders, cones, and spheres; find perimeters and areas of composite shapes; solve word problems involving perimeter, area, and volume
Level 7 Lesson 5	Solving Multistep Problems	Solve complex word problems that require several steps to determine an answer; solve word problems with more than one unknown; solve systems of linear equations
Level 7 Lesson 6	Using Graphs and Charts to Solve Problems	Obtain information from tables and charts and use the information to solve problems
Level 7 Lesson 7	Multistep/Decision Problems	Solve complex word problems that require several steps to determine an answer
Level 7 Lesson 8	Finding Mistakes	Check answers to word problems to determine if mistakes may have been made during the solution process



Locating Information		
Level #/ Lesson #	Learning Objective	Description
Level 1 Lesson 1	Graphics in the Workplace	Understand what graphics are and how they can be used to convey information; recognize graphics in the environment
Level 1 Lesson 2	Increasing Workplace Vocabulary	Understand different ways of sorting and arranging information; sort items in alphabetical, chronological, reverse chronological, ascending numerical, and descending numerical order; identify the next element in a pattern; prioritize tasks
Level 1 Lesson 3	Workplace Glossary	Learn the meaning of common technical terms used in the workplace; understand how to determine what unfamiliar terminology means and how it is used; recognize common abbreviations and know what they stand for
Level 1 Lesson 4	Using Headings of Graphics	Recognize titles of graphics and column and row headers in tables, and use them to determine the information being conveyed
Level 1 Lesson 5	Recognizing Key Words and Symbols	Recognize and know the meanings of common symbols in graphics and within text; understand percentages and averages; recognize "signal words" that indicate which information is desired
Level 2 Lesson 1	Learning to Use a Key	Use a key or legend to identify symbols on a map, chart, or graphic
Level 2 Lesson 2	Understanding Vertical and Horizontal Axes	Identify vertical and horizontal axes in graphs and charts; determine what information is shown on each axis by reading the axis labels
Level 2 Lesson 3	Following a Simple Flowchart	Read flowcharts; understand the different types of symbols that make up flowcharts
Level 2 Lesson 4	Recognizing Standard Formats of Data	Recognize the formats of certain types of information (phone numbers, Social Security numbers, addresses, dates); understand time zones and daylight savings time; recognize and look for information in footnotes; understand the parts of World Wide Web addresses and e-mail addresses
Level 2 Lesson 5	Using Standard Directions and Map Scales	Determine direction on a map; use scales to approximate distances on a map
Level 2 Lesson 6	Comparing Size and Area	Compare relative sizes of objects and symbols
Level 3 Lesson 1	Developing an Appreciation of Graphics	Develop an appreciation of the ways graphics can be used to represent information



Locating Information		
Level 3 Lesson 2	What Are Graphics and What Can They Do?	Learn about the uses and varieties of graphics used in the business world
Level 3 Lesson 3	Basic Strategies for Reading Graphics	Use the parts of graphics to determine purpose and locate information; recognize types of graphics
Level 3 Lesson 4	Identifying Basic Formats (or Types) & Reading Graphics	Recognize different types of graphics (tables, charts, graphs, maps, forms, and instruments); use parts of graphics to determine purpose
Level 3 Lesson 5	Extracting Data & Explaining the Significance	Read and gather information from graphics; understand how to read analog instruments
Level 3 Lesson 6	Inserting Information into a Document	Modify graphics to add information
Level 4 Lesson 1	Developing an Appreciation of Graphics	Develop an appreciation of the ways graphics can be used to represent information; demonstrate skill in previously taught concepts: recognizing different types of graphics, using parts of graphics to determine purpose, labeling axes of graphs, and determining information from graphics
Level 4 Lesson 2	What Are Graphics and What Can They Do?	Learn about the uses and varieties of graphics used in the business world
Level 4 Lesson 3	Identifying Basic Formats and Their Purpose	Recognize different types of graphics (tables, charts, graphs, maps, forms, and instruments); use parts of graphics to locate information
Level 4 Lesson 4	Extracting Data and Explaining the Significance	Extract information from graphics and explain its importance and meaning; insert information into graphics; compare different representations of the same data
Level 4 Lesson 5	Summarizing Trends and Comparing Main Points	Summarize information presented in a graphic; use parts of graphics to determine purpose; compare different representations of data
Level 4 Lesson 6	Drawing Conclusions from Two Similar Graphics	Compare two sets of data presented graphically to determine if there is a relationship between them; obtain information from multiple graphics and use the information to answer questions
Level 5 Lesson 1	Understand Specific Relationships Through Graphics	Understand the types of data different types of graphics can be used to depict
Level 5 Lesson 2	Representational Versus Nonrepresentational Graphics	Distinguish between representational graphics (where placement affects the data being represented) and nonrepresentational graphics (where placement does not affect the data being represented)



Locating Information		
Level 5 Lesson 3	Recognizing Discrete (Counted) Data Versus Continuous (Measured Over Time) Data	Distinguish between discrete and continuous data; understand that graphics can present information in ways that may be deceiving
Level 5 Lesson 4	Sorting through Extraneous Information	Determine what information on a graphic is needed to solve a problem and what information is not needed; solve problems by using information from graphics; use knowledge of graphics to read and interpret data from new kinds of information displays
Level 5 Lesson 5	Recognizing, Analyzing, and Synthesizing Essential Data	Solve problems by extracting needed data from graphics and combining the data according to the needs of the problem
Level 5 Lesson 6	Relating Multiple Graphics	Learn how multiple graphics can be used in combination to convey more complex information than would be possible using a single graphic; solve problems requiring extraction of information from multiple graphics
Level 5 Lesson 7	Recognizing and Applying Conditional Statements	Recognize and use conditional (if-then) statements to analyze data and solve problems
Level 5 Lesson 8	Recognizing and Applying Value Judgments	Develop skills at analyzing and weighing information to make judgments and evaluate options.
Level 6 Lesson 2	Drawing Conclusions from Confusing Graphics	Analyze complicated graphics showing a lot of information to determine which of that information is actually required for the immediate situation
Level 6 Lesson 3	Relating Data from Multiple Graphics	Solve problems using information from graphics that summarize more than one data stream
Level 6 Lesson 4	Assimilating Data, Comparing Information and Making Decisions	Synthesize information from multiple graphics to answer questions; draw conclusions based on patterns in data displayed in graphics
Level 6 Lesson 5	Prioritizing Criteria	Balance competing priorities and evaluate choices using information presented in graphics; synthesize information from multiple graphics to answer questions
Level 6 Lesson 6	Recognizing Verbal and Visual Clues in Complicated Graphics	Look for clues within complex graphics to help determine the information necessary to answer a question



Reading for Information		
Level #/ Lesson #	Learning Objective	Description
Level 1 Lesson 2	Finding the Right Word	Recognize and determine the proper word by using context clues within a sentence.
Level 1 Lesson 3	Using Word Parts	Recognize and determine word meaning by breaking a word into recognizable parts known as prefixes and suffixes.
Level 1 Lesson 4	Putting Two Words Together	Recognize and determine word meaning by isolating compound words within a text. Break the compound word into the original root words to determine the meaning of the overall combined word.
Level 1 Lesson 5	Using Words with More Than One Meaning	Recognize and determine word meaning by using context clues to decipher the definition of multiple meaning words.
Level 1 Lesson 6	Finding Out What Happens Next	Recognize and determine what will happen next by looking for time order words and sequence within a text to build comprehension. Identify the context clues; first, second, next, then, finally, before, after and last.
Level 1 Lesson 7	Finding Out What's Alike and What's Different	Recognize and determine what is alike and what is different by looking for context clues that demonstrate compare or contrast. Recognize the compare words; and, also, too, in the same way and both. Recognize the contrast words; but, yet, still, although, however, and on the other hand.
Level 1 Lesson 8	Finding Out What It Says and What It Means	Recognize and determine context meaning by using the information you read and drawing conclusions from the content.
Level 1 Lesson 9	Finding out What Happened and Why	Recognize and determine what happened and why by reading for cause and effect. Recognize and determine context meaning by utilizing context clues; breaking down words into usable parts; sequencing text; isolating words that show comparison, contrast, cause and effect; drawing conclusions based on information provided.
Level 2 Lesson 2	Deciding Which Word Makes Sense	Determine the proper word by using context clues to select the appropriate text to complete the sentence.
Level 2 Lesson 3	Using Word parts	Recognize and determine word meaning by breaking a word into recognizable parts and expanding your knowledge of prefixes and suffixes.
Level 2 Lesson 4	Using Words with Multiple Meanings	Recognize and determine word meaning by using context clues to decipher the definition of multiple meaning words.





Reading for Information		
Level 2 Lesson 5	Using Time	Recognize and determine sequence of a text by looking for time order words. Identify the context clues; first, second, next, then, finally, before, after, last and until.
Level 2 Lesson 6	Comparing and Contrasting	Recognize and determine what is alike and what is different by looking for context clues that demonstrate compare or contrast. Recognize the compare words; and, also, too, similarly, in the same way and both. Recognize the contrast words; but, although, however, and on the other hand.
Level 2 Lesson 7	Drawing Conclusions	Recognize and determine context meaning by using the information you read and drawing conclusions from the content details and your own background information.
Level 2 Lesson 8	Identifying Cause and Effect	Recognize and determine what happened and why by reading for cause and effect. Recognize the clue words for cause and effect; as a result, because, due to, since, therefore, and thus. Review using context clues, breaking words into usable parts, defining multiple meaning words, determining sequence, clue words for compare and contrast and drawing conclusions.
Level 3 Lesson 2	Identifying Main Ideas and Simple Details I	Recognize and determine the main idea and supporting details in the workplace text examples by creating a mind map.
Level 3 Lesson 3	Identifying Main Ideas and Simple Details II	Recognize and determine the main idea in the workplace text examples by using mind mapping to answer the question "what?".
Level 3 Lesson 4	Identifying Main Ideas and Simple Details III	Recognize and organize the details around the main idea to visualize your mind map and increase retention.
Level 3 Lesson 5	Determining Word Meaning through Context	Recognize and determine word meaning by using context clues in the form of examples, synonyms, antonyms, and general sense of the passage.
Level 3 Lesson 6	Determining the Meaning of Words I	Recognize and determine word meaning by using workplace job references such as procedures manual and employee handbooks.
Level 3 Lesson 7	Determining the Meaning of Words II	Recognize and determine word meaning by breaking a word into recognizable parts such as prefixes. Identify in, pre, ex, over, and mis.
Level 3 Lesson 8	Understanding Sequence of Events	Recognize and determine what will happen next by looking for sequence within instructions, schedules, processes and procedures. Identify the context clues; initially, first, second, next, then, finally, before, after that, last, subsequent, later and until.



Reading for Information		
Level 3 Lesson 9	Understanding Instructions	Recognize instructions and determine sequence and steps to complete the task or objective using signal words. Review locating the main idea and supporting details, to answer questions about information provided in the workplace writing samples by using context clues, mind mapping, visualizing, isolating main idea and details, breaking down words into usable parts, and sequencing text.
Level 4 Lesson 2	Identifying Important Details	Recognize and determine the supporting details in the workplace text by using visualizing and mind mapping as tools.
Level 4 Lesson 3	Applying Instructions	Recognize and determine what will happen next by looking for sequence when applied to directions. Identify the context clues for order; first, second, next, and last. Identify the context clues for time; when, while, during, before, and after. Use an outline or flowchart to organize information gathered.
Level 4 Lesson 4	Recognizing Cause and Effect Relationships I	Recognize and identify cause-effect and problem-solution relationships. Recognize the connecting words; because, since, therefore, and if-then to determine the relationship between events.
Level 4 Lesson 5	Recognizing Cause and Effect Relationships II	Recognize and identify cause-effect and problem-solution relationships in procedure and employee manuals.
Level 4 Lesson 6	Recognizing Cause and Effect Relationships III	Recognize and identify cause-effect and problem-solution relationships using verbs and signal words, by asking questions and charting actions.
Level 4 Lesson 7	Using Context Clues to Determine Meaning	Recognize and identify context clues in procedure and employee manuals. Identify the organization, relationships in the text, details, main idea to anticipate and predict meaning. Review visualizing and mind mapping, sequence and outlining, identifying cause-effect and problem-solution relationships, identifying signal words, asking questions and making predictions.
Level 5 Lesson 2	Understanding Paraphrased Definitions	Recognize and identify examples, synonyms, antonyms, acronyms while utilizing knowledge of punctuation and typography to understand paraphrased definitions and overall context of the text.
Level 5 Lesson 3	Using Jargon or Technical Terms Appropriately	Recognize and determine meaning of jargon and technical terms by making connections to the context of the passage. Utilize the concept circle to develop meaning of a word.



Reading for Information		
Level 5 Lesson 4	Understanding Acronyms	Recognize workplace acronyms and conventions used in writing, acronym type (pure, hybrid and syllabic), and decoding and creating acronyms to determine meaning in text.
Level 5 Lesson 5	Defining Words with Multiple Meanings	Recognize and determine context of workplace text using context clues and part of speech to decipher correct meaning for words with multiple meanings.
Level 5 Lesson 6	Applying Information to Undescribed Situations I	Recognize and organize context of workplace text using timelines and application of paraphrased definitions to identify key details and chronology for complex procedures and apply the information to situations not written in the text.
Level 5 Lesson 7	Applying Information to Undescribed Situations II	Recognize and organize context of workplace text using flowcharts to visualize and identify cause-effect and problem-solution relationships and expected outcomes. Interpret information provided to draw a conclusion to situations not described in the text.
Level 5 Lesson 8	Applying Complicated Instructions I	Practice using information provided to use complicated instructions by considering variables and drawing conclusions based on information provided but not directly stated.
Level 5 Lesson 9	Applying Complicated Instructions II	Apply identifying key details, identifying paraphrased definitions, organization and using prior knowledge to draw conclusions and make founded decisions. Review using context meaning by utilizing jargon or technical terms and paraphrased definitions in the passage, word meaning and concept circles, acronyms, multiple meaning words, outlines to organize information, main idea and details and applying information in the passage to draw conclusions to situations not described in the text.
Level 6 Lesson 3	Identifying Implied Details I	Recognize implied details and avoid false assumptions to draw inferences based on the authors word choice and presentation.
Level 6 Lesson 4	Identifying Implied Details II	Recognize implied details and examine word choice to make inferences about the text.
Level 6 Lesson 5	Understanding Jargon or Technical Terms	Recognize jargon and technical terms in unfamiliar context. Determine use of shorthand and construction of words and recognize the dangers of jargon and the authors intended purpose.
Level 6 Lesson 6	Determining the Less Common Meaning of Words	Recognize jargon and technical terms in unfamiliar context. Infer the definition and use of unknown words buy looking at the range of context clues for the less common meaning.



Reading for Information		
Level 6 Lesson 7	Applying Complicated Information to New Situations	Recognize and summarize crucial cause-effect information from technical text. Research and apply skills acquired to research, organize, and write a safety training proposal.
Level 6 Lesson 8	Determining the General Principles in Reading Materials	Recognize and summarize similarities in information from technical text. Apply knowledge gained to write policy summaries.
Level 6 Lesson 9	Understanding the Reasoning Behind a Policy, Procedure, or Communication	Recognize and determine reasoning behind workplace text using subjective reasoning. Review and utilize tools learned to define unfamiliar words, develop an outline or use mind mapping to identify main ideas and details, chart cause-effect or problem-solution relationships, use comprehension strategies, summarize-paraphrase the information to draw inferences and avoid false assumptions.
Level 7 Lesson 3	Determining the Meaning of Jargon or Technical Terms I	Determine word meaning by recognizing the most common word structure. Utilize knowledge of prefixes, suffixes and Latin roots to create new workplace words.
Level 7 Lesson 4	Determining the Meaning of Jargon or Technical Terms II	Determine word meaning by utilizing context clues and integrating questions about the context.
Level 7 Lesson 5	Determining the Meaning of Jargon or Technical Terms III	Determine word meaning by utilizing knowledge of multiple meaning words, context clues, word structure, and integrating questions about the context.
Level 7 Lesson 6	Drawing Inferences I	Recognize complex workplace text and utilize flowcharts to organize and analyze details in order to glean the main idea from the passage.
Level 7 Lesson 7	Drawing Inferences II	Recognize opportunities for problem solving and inference within the workforce. Look for direction and details within the provided workplace text and construct a memo in support of your conclusions.
Level 7 Lesson 8	Drawing Inferences III	Determine reasoning behind text and rational for the way it is written.
Level 7 Lesson 9	Drawing Inferences IV	Recognize and determine reasoning behind workplace text. Review and utilize tools learned to define unfamiliar words, use context clues, infer general principles and apply to new situations, utilize outlining, charting or mind mapping to identify main ideas and details, identify cause-effect or problem-solution relationships, and use comprehension strategies.