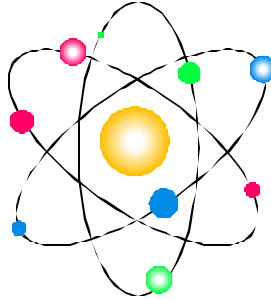


# PROJECT ATOMS



## Child Development And Family Studies (CDEC) ESSENTIAL MATHEMATICS SKILLS

|                                                                                                                                           |                                                                                                                               | VIDEO TAPE                                                                |              |                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------|
| SKILLS                                                                                                                                    | TEXT                                                                                                                          | FULL TITLE                                                                | ABBREVIATION | SOFTWARE TITLE                                                                                              |
| A. (1) Whole Numbers and Variable Expressions                                                                                             |                                                                                                                               |                                                                           |              |                                                                                                             |
| (1.1) Introduction to whole numbers<br>Order relation between whole numbers<br>Place value<br>Applications                                | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 1 section 1<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | #1 Place Value and Reading Tables                                         |              | Passkey Lessons<br>Whole Numbers<br><br>Place Value and Reading Tables                                      |
| (1.2) Addition and subtraction of whole numbers<br>Addition of whole numbers<br>Subtraction of whole numbers<br>Applications and formulas | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 1 section 2<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | #1 Adding Whole Numbers And Perimeter<br><br>#1 Subtracting Whole Numbers |              | Passkey Lessons<br>Whole Numbers<br><br>Adding Whole Numbers And Perimeter<br><br>Subtracting Whole Numbers |

|                                                                                                                                                                                                  |                                                                                                                               | VIDEO TAPE                                                                                  |                                     |                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKILLS                                                                                                                                                                                           | TEXT                                                                                                                          | FULL TITLE                                                                                  | ABBREVIATION                        | SOFTWARE TITLE                                                                                                                                            |
| (1.3) Multiplication and Division of Whole Numkbers<br>Multiplication of whole numbers<br>Exponents<br>Division of whole numbers<br>Factors and prime factorization<br>Applications and formulas | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 1 section 3<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | #2 Multiplying Whole Numbers And Area<br><br>#2 Dividing Whole Numbers                      |                                     | Passkey Lessons Whole Numbers<br><br>Multiplying Whole Numbers And Area<br><br>Dividing Whole Numbers                                                     |
| (1.4) Rounding and Estimation<br>Rounding<br>Estimation<br>Applications                                                                                                                          | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 1 Section 4<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | Approximation, Rounding, Estimation<br><br>#1 Rounding And Estimating                       | Approximation, Rounding, Estimation | Passkey Lessons Decimals<br><br>Rounding And Estimating                                                                                                   |
| (1.5) The Order of Operations Agreement<br>The order of operations agreement                                                                                                                     | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 1 section 5<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | The Order Of Operations Agreement - Whole Numbers Expressions<br><br>#4 Order Of Operations | Order of Oper & $ax+b=c$            | Algebra Mentor Lessons 59-67<br><br>The Order Of Operations Agreement<br><br>Passkey Lessons Order Of Operations<br><br>Exponents And Order Of Operations |

|                                                                                                                                                                         |                                                                                                                           | VIDEO TAPE                       |                                  |                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| SKILLS                                                                                                                                                                  | TEXT                                                                                                                      | FULL TITLE                       | ABBREVIATION                     | SOFTWARE TITLE                                                                                                        |
| <b>(3) Fractions</b>                                                                                                                                                    |                                                                                                                           |                                  |                                  |                                                                                                                       |
| (3.1) Least common multiple and greatest common factor<br>Least common multiple (LCM)<br>Greatest common factor (GCF)<br>Applications                                   | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 3 section 1<br><br>PreAlgebra by Martin/Gay<br><b>(VISIT MATH LAB)</b> |                                  |                                  | Algebra Mentor Lessons 157-160<br><br>Least Common Multiple & Greatest Common Factor<br><br>Passkey Lessons Fractions |
| (3.2) Introduction to fractions<br>Proper fractions, improper fractions, mixed numbers<br>Equivalent fractions<br>Order relations between two fractions<br>Applications | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 3 section 2<br><br>PreAlgebra by Martin/Gay<br><b>(VISIT MATH LAB)</b> | Math: Fractions & Decimals (F11) | Math: Fractions & Decimals (F11) | Passkey Lessons Fractions<br><br>Algebra Mentor Lessons 158-160<br><br>Introduction to fractions                      |

|                                                                                                                                     |                                                                                                                               | VIDEO TAPE                                                                                                                                                                                                                                                            |                                                                                                   |                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKILLS                                                                                                                              | TEXT                                                                                                                          | FULL TITLE                                                                                                                                                                                                                                                            | ABBREVIATION                                                                                      | SOFTWARE TITLE                                                                                                                                                                                               |
| (3.3) Addition and subtraction of fractions<br>Addition of fractions<br>Subtraction of fractions<br>Applications and formulas       | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 3 section 3<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | Addition and Subtraction of Signed Fractions<br>Addition and Subtraction of Mixed Numbers Math: Fractions & Decimals (F11)<br><br>#6 Adding And Subtracting Fractions With Least Common Denominators<br><br>Adding And Subtracting Fractions With Unlike Denominators | Addition & -MXD Frac,Exp<br><br>Addition & - of Sgnd Frac<br><br>Math: Fractions & Decimals (F11) | Passkey Lessons Fractions<br><br>Addition & Subtraction Of Fractions<br><br>Adding And Subtracting Fractions With Least Common Denominators<br><br>Adding And Subtracting Fractions With Unlike Denominators |
| (3.4) Multiplication and division of fractions<br>Multiplication of fractions<br>Division of fractions<br>Applications and formulas | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 3 section 4<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | Math: Fractions & Decimals (F11)<br><br>#6 Multiplying And Dividing Fractions                                                                                                                                                                                         | Math: Fractions & Decimals (F11)                                                                  | Passkey Lessons Fractions<br><br>Multiplication & Division Of Fractions<br><br>Multiplying And Dividing Fractions                                                                                            |

|                                                                                                                                  |                                                                                                                                     | VIDEO TAPE                                                                              |                                        |                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKILLS                                                                                                                           | TEXT                                                                                                                                | FULL TITLE                                                                              | ABBREVIATION                           | SOFTWARE TITLE                                                                                                                                                 |
| <b>(4) Decimals and Real Numbers</b>                                                                                             |                                                                                                                                     |                                                                                         |                                        |                                                                                                                                                                |
| (4.1) Introduction to decimals<br>Place value<br>Order relations between decimals<br>Rounding<br>Applications                    | PreAlgebra Text by<br>Aufmann/Barker/Lockwood<br>Chapter 4 section 1<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | Approximation,<br>Rounding, Estimation<br><br>#7 Introduction To<br>Decimals            | Approximation,<br>Rounding, Estimation | Passkey Lessons<br>Decimals<br><br>Introduction To<br>Decimals                                                                                                 |
| (4.2) Addition and subtraction of<br>decimals<br>Addition and subtraction of decimals<br>Estimation<br>Applications and formulas | PreAlgebra Text by<br>Aufmann/Barker/Lockwood<br>Chapter 4 section 2<br>PreAlgebra by Martin/Gay<br><b>(VISIT MATH LAB)</b>         | #8 Adding And<br>Subtracting Decimals                                                   |                                        | Passkey Lessons<br>Decimals<br><br>Adding And Subtracting<br>Decimals                                                                                          |
| (4.3) Multiplication and division of<br>decimals<br>Multiplication of decimals<br>Fractions and decimals                         | PreAlgebra Text by<br>Aufmann/Barker/Lockwood<br>Chapter 4 section 3<br><br>PreAlgebra by Martin/Gay<br><br><b>(VISIT MATH LAB)</b> | #8 Multiplying<br>Decimals And<br>Circumference Of A<br>Circle<br><br>Dividing Decimals |                                        | Passkey Lessons<br>Decimals<br><br>Multiplication And<br>Division Of Decimals<br>Multiplying Decimals<br>And Circumference Of<br>A Circle<br>Dividing Decimals |
| (4.5) Real Numbers<br>Real numbers and the real number<br>line<br>Inequalities in one variable<br>Applications                   | PreAlgebra Text by<br>Aufmann/Barker/Lockwood<br>Chapter 4 section 5<br>PreAlgebra by Martin/Gay<br><b>(VISIT MATH LAB)</b>         | Naturals, Real<br>Numbers (MTH 106)                                                     | Naturals, Real<br>Numbers (MTH 106)    | Passkey Lessons<br>Inequalities<br><br>Inequalities                                                                                                            |

|                                                                                                                     |      | VIDEO TAPE                                                                                      |                          |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------|
| SKILLS                                                                                                              | TEXT | FULL TITLE                                                                                      | ABBREVIATION             | SOFTWARE TITLE                                                                         |
| <b>(7) Ratio and Proportion</b>                                                                                     |      |                                                                                                 |                          |                                                                                        |
| (7.1) Ratios and rates<br>Ratios and rates<br>Dimensional Analysis<br>Applications                                  |      | #11 Ratios                                                                                      |                          | Ratio, Proportion, And<br>Measurement                                                  |
| <b>(8) Percent</b>                                                                                                  |      |                                                                                                 |                          |                                                                                        |
| (8.1) Percent<br>Percents as decimals or fractions<br>Fractions and decimals as percents                            |      | Converting<br>Percent/Fractions/<br>Decimals<br><br>#13 Percents,<br>Decimals, and<br>Fractions | Converting<br>%/Frac/Dec | Percent<br><br>Passkey Lessons<br>Percents<br><br>Percents, Decimals, and<br>Fractions |
| (8.2) The basic percent equation<br>The base percent equation<br>Percent problems using proportions<br>Applications |      | The Basic Percent<br>Equation                                                                   | Converting<br>%/Frac/Dec | The Basic Percent<br>Equation<br><br>Passkey Lessons<br>Percents                       |

|                                                                                                                                                                                |                                                                                                                       | VIDEO TAPE                                                       |                          |                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| SKILLS                                                                                                                                                                         | TEXT                                                                                                                  | FULL TITLE                                                       | ABBREVIATION             | SOFTWARE TITLE                                                                                                                 |
| <b>(9) Geometry</b>                                                                                                                                                            |                                                                                                                       |                                                                  |                          |                                                                                                                                |
| (9.1) Introduction to geometry<br>Problems involving lines and angles<br>Problems involving angles formed by intersection lines<br>Problems involving the angles of a triangle |                                                                                                                       |                                                                  |                          | Passkey Lessons Geometry<br><br>Introduction to Geometry                                                                       |
| (9.2) Plane geometric figures<br>Perimeter of a plane geometric figure<br>Area of a plane geometric figure                                                                     |                                                                                                                       | #1 Adding Whole Numbers and Perimeter<br><br>#10 Area and Volume |                          | Passkey Lessons Geometry<br><br>Adding Whole Numbers and Perimeter<br><br>Area and Volume<br><br>Perimeter and Problem Solving |
| <b>D. (1) Arithmetic</b>                                                                                                                                                       |                                                                                                                       |                                                                  |                          |                                                                                                                                |
| (1.11) Arithmetic with calculators                                                                                                                                             |                                                                                                                       |                                                                  |                          |                                                                                                                                |
|                                                                                                                                                                                |                                                                                                                       | VIDEO TAPE                                                       |                          |                                                                                                                                |
| SKILLS                                                                                                                                                                         | TEXT                                                                                                                  | FULL TITLE                                                       | ABBREVIATION             | SOFTWARE TITLE                                                                                                                 |
| <b>A. (2) Integers</b>                                                                                                                                                         |                                                                                                                       |                                                                  |                          |                                                                                                                                |
| (2.1) Introduction to integers<br>Integers and the number line numbers<br>Place value<br>Applications                                                                          | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 2 section 1<br>PreAlgebra by Martin/Gay<br><b>(VISIT MATH LAB)</b> | Order of Operations Integers<br><br>#3 Introduction to Integers  | ORDR OPER Adding & - Int | Passkey Lessons Order of Operations<br><br>Introduction to Integers                                                            |

| SKILLS                                                                                                                     | TEXT                                                                                                                   | VIDEO TAPE                                                                        |                             | SOFTWARE TITLE                                                                                |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
|                                                                                                                            |                                                                                                                        | FULL TITLE                                                                        | ABBREVIATION                |                                                                                               |
| (2.2) Addition and subtraction of integers<br>Addition of integers<br>Subtraction of integers<br>Applications and formulas | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 2 section 2<br><br>PreAlgebra by Martin/Gay <b>(VISIT MATH LAB)</b> | Adding and Subtracting Integers<br><br>#3 Adding Integers<br>Subtracting Integers | Adding & -Int.<br>Ordr Oper | Algebra Mentor Lessons 2-31<br><br>Addition & Subtraction of Integers<br>Passkey Lesson M1311 |
| (2.3) Multiplication and Division of integers<br>Multiplication of integers<br>Division of integers<br>Applications        | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 2 section 3<br><br>PreAlgebra by Martin/Gay <b>(VISIT MATH LAB)</b> | #3 Multiplying and Dividing Integers                                              |                             | Passkey Lesson M1311<br><br>Multiplication & Division of Integers                             |
| (2.4) The order of operations agreement<br>The order of operations agreement                                               | PreAlgebra Text by Aufmann/Barker/Lockwood Chapter 2 section 4<br><br>PreAlgebra by Martin/Gay <b>(VISIT MATH LAB)</b> | Order of Operations Integers<br><br>#4 Order of Operations                        | Adding & -Int.<br>Ordr oper | Algebra Mentor Lessons 59-65<br><br>The Order of Operations Agreement                         |



|                                                                                                                                    |                          | VIDEO TAPE                                                                                                                                                                                                                     |                           |                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKILLS                                                                                                                             | TEXT                     | FULL TITLE                                                                                                                                                                                                                     | ABBREVIATION              | SOFTWARE TITLE                                                                                                                                                                 |
| <b>(6) First -Degree Equation</b>                                                                                                  |                          |                                                                                                                                                                                                                                |                           |                                                                                                                                                                                |
| (6.1) Introduction to equations<br>Solutions of an equation<br>Equations of the form $x + a = b$<br>Equations of the form $ax = b$ | PreAlgebra by Martin/Gay | Introduction to Solving<br>Linear Equations-<br>Addition<br>prop of Equations-<br>Multiplication property<br>of Equations<br><br>#5 Solving Linear<br>Equations In One<br>Variable And Problem<br>Solving<br><br>The Equalizer | Introduction to Lin<br>Eq | Algebra Mentor<br>Lessons 197-209<br><br>Passkey Lessons<br>Equations<br><br>Introduction to<br>equations<br><br>Solving Equations And<br>Problem Solving<br><br>The Equalizer |
| <b>D. (2) Units of Measurement and Approximate Numbers</b>                                                                         |                          |                                                                                                                                                                                                                                |                           |                                                                                                                                                                                |
| (2.1) Units of measurement: The<br>Metric System                                                                                   |                          |                                                                                                                                                                                                                                |                           | Passkey Lessons<br>Measurement                                                                                                                                                 |
| <b>(4) Introduction to Algebra</b>                                                                                                 |                          |                                                                                                                                                                                                                                |                           |                                                                                                                                                                                |
| (4.3) Introduction to algebraic<br>operations                                                                                      |                          | #4 Simplifying<br>Algebraic Operations                                                                                                                                                                                         |                           | Simplifying Algebraic<br>Operations                                                                                                                                            |

|                                                      |      | VIDEO TAPE                                                |                             |                                                                                                     |
|------------------------------------------------------|------|-----------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------|
| SKILLS                                               | TEXT | FULL TITLE                                                | ABBREVIATION                | SOFTWARE TITLE                                                                                      |
| <b>(15) Additional Topics from Geometry</b>          |      |                                                           |                             |                                                                                                     |
| (15.3) The Pythagorean Theorem                       |      | #9 Square Roots and Pythagorean Theorem                   |                             | Passkey Lessons<br>Geometry<br>Square Roots and Pythagorean Theorem                                 |
| (15.4) Similiar Triangles                            |      | #11 Problem Solving with Proportion and Similar Triangles |                             | Passkey Lessons<br>Geometry<br><br>Problem Solving with Proportion and Similar Triangles            |
| (15.5) Solid geometric figures: Prisms and cylinders |      |                                                           |                             | Passkey Lessons<br>Geometry                                                                         |
| <b>E. (13) Geometry</b>                              |      |                                                           |                             |                                                                                                     |
| (13.1) Functions                                     |      | Functional Notation And Operations                        | Function Not & Lin Func     | Passkey Lessons<br>Graphing                                                                         |
| (13.2) The rectangular coordinate system             |      | Cartesian Coordinate System                               | Cartesian Coor & Rel & Func | Algebra Mentor<br>Lessons 80-85<br><br>Graphing Linear Equations<br><br>Passkey Lessons<br>Graphing |
| (13.3) The graph of a function                       |      | The Intercepts                                            | The Intercepts              | Algebra Mentor<br>Lessons 80-85<br><br>Graphing Linear Equations<br><br>Passkey Lessons Graphing    |