The Dolciani Math Center (7th Floor Hunter East) has multi-media materials for the following topics in BIOLOGY- EDUCATION. Bring your ID card to the Learning Center and ask for the lesson by the call number below. If there is more than one number listed, there are several alternatives for the lesson. You may pick and choose which works best for you. Situational DVDs ( ${ }^{* *}$ ) relate concepts to real-life situations. Tutorial CDs and DVDs present computations related to concepts.

| TOPIC | DVD | TUTORIAL DVDS | $\begin{aligned} & \text { AVAILABLE ON PLATO } \\ & \text { UNDER: } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| The Real Number System and Arithmetic and Propertics of Real Numbers |  | Al, V1, Xl | Integers: Concepts and Operations |
| Exponents |  | AT3, S1, X1 | Exponents and Order of Operations: Introdictory |
| Scienifici Notation |  | S1,V6 | Scientific Notation |
| Solving and Using Linear Equations | J5 | $\begin{aligned} & \mathrm{Al} 1, \mathrm{AA}, \mathrm{S2}, \mathrm{V1}, \\ & \mathrm{~V} 2, \mathrm{X} 2 \end{aligned}$ | Linear and Literal Equations and Formulas |
| Appications: Investment, Uniform Motion, Mixture |  | S2,V2 | Verbal Problems-Intoductory: Creating and Soving |
| Graphing Linear Equations |  | A4, Cl Less 3a, $3 b, 3 c, G 1,54$, <br> v3, X5 | Graphing Linear Equations |
| Slope of a Nonvertical Line |  | A4, A7, CI Less 3a, 3b, 3c, Gl, X5 | Graphing Linear Equations |
| Writing Equations of Lines |  | $\begin{aligned} & \mathrm{A}, \mathrm{Cl} \text { Less } 3 \mathrm{C}, \\ & \mathrm{G-1,S4,V3,X5} \end{aligned}$ | Graphing Linear Equations |
| Introduction to Functions | J13 | $\begin{aligned} & \text { A93, CI Less 4a, } \\ & \text { G1, V4, X10 } \end{aligned}$ | Functions: Notation, Domain, Range, Properties, etc. |
| Graphs of Other Finctions |  | $\begin{aligned} & \mathrm{AT3}, \mathrm{Gl}, \mathrm{Kl}, \mathrm{V4}, \\ & \mathrm{~V} 10, \mathrm{X10} \end{aligned}$ | Functions: Translating, Combining, Graphing, Inverse |
| Solution by Graphing |  | G7, S4, V4, X7 | Systems of Linear Equations |
| Soultion by Elimination | 520 | $\begin{aligned} & \text { A5, G7, K5, S4, } \\ & \mathrm{V4}, \mathrm{X8} \end{aligned}$ | Systems of Linar Equations |
| Linear Inequalities | 18 | $\begin{aligned} & \mathrm{A}, \mathrm{~A}, \mathrm{S2}, \mathrm{~V}, \\ & \mathrm{X} 4 \end{aligned}$ | Systems of Linear Equations |
| Equations and Inequalities with Absolute Values | J9 | A5, AT1, V3 | Absolut Value Inequalities |
| Linear Inequalities in Two Variables |  | S4, V3, X5 | Systems of Linear and Quadratic Equations |
| Systems of Inequalities | J21 | G-7, S4, V5, X8 | Systems of Linear and Quadraic Equations |
| Polynomials and Polynomial Functions |  | ATI, CI Less 4a, 4b, 5a, G-2 | Polynomials: Concepts, Operations, Equivaence |
| Adding and Subtracting Polynomias |  | $\begin{aligned} & \mathrm{A} 2, \mathrm{A3}, \mathrm{AT1}, \\ & \mathrm{Sl} 1, \mathrm{~V}, \mathrm{XS} \\ & \hline \end{aligned}$ | Polynomials: Concepts, Operations, Equiralence |
| Mulipylying Polynomias |  | $\begin{aligned} & \mathrm{AA2}, \mathrm{A3}, \mathrm{AT1}, \mathrm{Sl}, \\ & \mathrm{~S} 2, \mathrm{~V}, \mathrm{X} 6 \end{aligned}$ | Polynomials: Concepts, Operations, Equivaence |
| Dividing Plynomials |  | AT1, S2, V7, X6 | Polynomials: Concepts, Operations, Equiraence |
| The Greatest Common Factor \& Factoring by Grouping | I4 | A2, A3, A6, AT1, S2, V6, X6 | Factors and Muliples \& Factoring Polynomials |
| The Difference of Two Squares; The Sum and Difference of Two Cubes | I4 | A2, A3, A6, AT1, S2, V6, X6 | Factoring Plynomials |
| Factoring Trinomials | I4 | A2, A3, A6, AT1, S3, V6, X6 | Factoring Polynomiak |
| Sunmary of Factoring Techniques | 14 | A2, A3, A6, AT1, $53, \mathrm{~V} 6$ | Factoring PPlynomiak |


| TOPIC | DVD | TUTORIAL DVDS | $\begin{aligned} & \text { AVAILABLE ON PLAT0 } \\ & \text { UNDER: } \end{aligned}$ | TOPIC | DVD | TUTORIAL DVDS | AVALLABLE ON PLATO <br> UNDER: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Integers and the Operations of |  |  |  | Solving Equations by Factoring | J7 | A6, V7, X7 | Quadratic Equations: Solving |
| Addition and Subtraction | D3 | B1 Less 6, Y2 | Integers: Concepts and Operations | Rational Functions \& Simplifying Rational Expressions |  | AT1, V7, X7 | Rational Expressions: Concepts, Operations, and Solving |
| Multipication and Division of |  |  |  | Proportion and Variation |  | V8, X3 | Probability Introductory |
| Integers | D3 | B1 Less 6, Y2 | Integers: Concepts and Operations | Multiplying and Dividing Rational |  |  | Rational Expressions: Concepts, |
| Divisibility | D3 | B1 Less 3, Y2 | Integers: Concepts and Operations | Expressions |  | $\mathrm{A}^{3}, \mathrm{AT1}, \mathrm{~V} 7, \mathrm{X} 7$ | Operations, and Solving |
| Prime and Composite Numbers | D3 | B1 Less 4 |  | Adding and Subtracting Rational Expressions |  | $\begin{aligned} & \mathrm{A} 3, \mathrm{AT1}, \mathrm{S3}, \mathrm{~V} 7, \\ & \mathrm{x} 7 \end{aligned}$ | Rational Expressions: Concepts, Operations, and Solving |
| Greatest Common Divisor and Least <br> Common Multiple | D3 | B1 Less 5,6, Y2 | Factors and Multiples | Complex Fractions |  | AT1, V7, X7 | Fractions: Defintion, Notation, Simplifying, and Comparing |
| Clock and Modular Arithmetic | D3 | B4Less 8,9 |  | Equations Containing Rational Expressions |  | $\begin{aligned} & \mathrm{A} 4, \mathrm{AT1}, \mathrm{S3}, \mathrm{~V} 7, \\ & \mathrm{X} 7 \end{aligned}$ | Rational Expressions: Concepts, Operations, and Solving |
| The Set of Rational Numbers | D3 | B1 Less 7, Y3 | Fractions: Definition, Notation, Simplifying and Comparing |  |  | $\mathrm{X7}$ <br> $\mathrm{A5}, \mathrm{~A} 7, \mathrm{ATl}$, <br> $\mathrm{AT2}, \mathrm{S3}, \mathrm{S4}, \mathrm{~V} 8$, | Operations, and Solving Rationals and Radicals: |
| Operations on Rationals | D3 | Y3 | Fractions: Operations | Radical Expressions |  |  | Exponents and Equations |
| Proportional Reasoning | D4 | Y8 | Rates, Ratio, and Proportion |  |  | C1 Less 2, V8, | Rationals and Radicals: |
|  |  |  | Decimal Concepts: Place Value, Ordering, | Applications of Radicals |  |  | Exponents and Equations |
| Introduction to Decimals | D4 | Y4 | Rounding | Rational Expone |  |  | Rationals and Radicals: Exponents and Equations |
| Operations on Decimals | D4 | Y4, Y5 | Decimals: Operations |  |  | 5, A7, A8, AT2, | Rationals and Radicals: |
| Percents | D4 | Y8 | Percent | Operations on Radical Expressions |  | S3, 54,V8, X9 | Exponents and Equations |
| How Probabilities Are Determined | D4 | Н9, J26, L1,L4, SB15 | Probability: Introductory | Solving Radical Equations |  | AT2, S4, V8, X9 | Rationals and Radicals: Exponents and Equations |
| Multistage Experiments with Tree |  |  |  | Complex Numbers |  | $\begin{aligned} & \hline \text { A7, AT2, G-2, } \\ & \text { v9, X10 } \end{aligned}$ | Complex Numbers |
| Diagrams and Geometric <br> Probabilities | D4 | G9, L3, L4, <br> SB15,SB16 | Probability: Introductory | Solving Quadratic Equations by Completing the Square |  | $\mathrm{A} 6, \mathrm{~A} 8, \mathrm{~A} 10, \mathrm{~S} 4,$ V9, X9 | Quadratic Equations: Solving |
| Statisicical Graphs | D5 | SB2 | Probability: Introductory | Solving Quadratic Equations by the |  |  |  |
| Measures of Central Tendency and |  |  |  | Quadratic Formula |  | AT2, V9, X10 | Quadratic Equations: Solving |
| Variation | D5 | H8,II, SB4 | Probability: Conditional Probability | The Discriminant and Equations that can be written in Quadratic Form |  | AT2 |  |
| Abuses of Statisics | D5 |  | Probability: Conditional Probability | Graphs of Quadratic Functions |  | AT3, V10, X10 | Conic Sections |
| Basic Notions | D5 | Z1 |  | Piecewise-Defined Functions and the |  |  |  |
|  |  |  | Introduction to Geometry: Angles, Lines and | Greatest Integer Function | J16 | G1, K1, K2 |  |
| Polygons | D5 | Z3 | Polygons | Algebra and Composition of Functions | J14 | V11 | Functions: Translating, <br> Combinging, Graphing, Inverse |
| More About Angles | D5 | $\mathrm{Z2}$ | Introduction to Geometry: Angles, Lines and Polygons | Inverses of Functions | J14 | G2, K1, SB2, V11 | Functions: Translating, Combinging, Graphing, Inverse |
| Networks | D5 | Z5 |  |  |  | A8, A9, AT3, | Functions: Exponential and |
| Congruence Through Constructions | D6 |  | Congruence, Proofs and Constructions | Exponential Functions | J18 | G3, K20, V10 | Logarithmic |
| Other Congruence Properties | D6 | Z3 | Congruence, Proofs and Constructions | Logarithmic Functions |  | $\begin{aligned} & \mathrm{A} 8, \mathrm{~A} 9, \mathrm{AT3} 3, \\ & \mathrm{G} 3 \mathrm{k} 2 \mathrm{~V} 11 \end{aligned}$ | Functions: Exponential and Logarithmic |
| Similar Triangles and Similar Figures | D6 | Z4 | Transformational Geometry | Explorations with Patterns | D1 |  | Patterns and Sequences |
| Lines in a Cartesian Coordinate |  |  |  | Mathematics and Problem Solving | D1 |  | Pror |
| System | D6 | Z7,Z8 | Graphing |  |  |  | Linear and Literal Equations and |
|  |  |  | Measurement: Metric System and Standard | Algebraic Thinking | D1 |  | Formulas |
| Linear Measure | D6 |  |  | Describing Sets | D1 | B3 Less 1, Y10 | Sets and Venn Diagrams |
| Areas of Polygons and Circles | D6 | Z6, Z7 | Area, Perimeter and Cirumference | Set Operations and Their Properties | D1 | B3 Less 2, 3, 4, Y5 | Sets and Venn Diagrams |
| The Pythagorean Theorem and The |  |  |  | Operations on Whole Numbers | D1 | B1 Less 6, Y1 |  |
| Distance Formula | D6 | A4,Z5 |  |  |  |  | Functions: Notation, Domain, |
| Surface Areas, Mass, Temperature | D6 | Z7 | Area, Perimeter and Cirumference | Functions | D1 | B4 Less 1, G-1 | Range, Properties, etc. |
|  |  |  | Functions: Translating, Combining, Graphing, | Numeration Systems | D2 | Y1, Y2, Y5 |  |
| Translations and Rotations | D6 | Z3 | Inverse | Algorithms for Whole-Number Addition and Subtraction | D2 | Y1 |  |
| Reflections and Glide Reflections | D6 | Z3 | Transformational Geometry | Algorithms for Whole-Number |  |  |  |
| Symmetries | D6 | Z3 | Transformational Geometry | Multipication and Division | D2 | Y1 |  |

