

### Quick Reference Guide



TOLL FREE: 877–795–8904 Toll Free from Alaska: 866–882–6940 Tel: 480–940–0801 eFax: 866–465–1954

OdysseyWare, Inc.

300 N. McKemy Ave. Chandler, AZ 85226

Email: info@odysseyware.com



### **Table of Contents**

History	p 2-4
English	p 5-6
Math	p 7-9
Science	p 10-11
Testing	p 12
Electives	p 13-17





# History GRADES 3-8

**History/Geography 300 (10 Units)**: Communities- mining: iron ore, drilling for petroleum, gold, silver, and copper, farming, fishing, cattle ranching, dairy farming, manufacturing: automobiles, cereal, furniture, chemicals, technology, space

**History/Geography 400 (10 Units)**: Surface of the earth, space exploration, Seaport Cities: Sydney, Hong Kong, China, life in the desert, deserts of the Southern Hemisphere, modern ways of life, grasslands, tropical rainforests, polar regions, mountain countries, North America

**History/Geography 500 (10 Units):** History from the Vikings to early settlers to developing into a world power, relations to Canada and South America

History/Geography 600 (10 Units): Development of all continents and history of the world

World Civilizations 700 (10 Units) Religions and politics as well as history of development to the present; relations between countries

History/Geography 800 (10 Units) Colonies and evolution of our country. Includes detailed accounts and WWI and WWII





**World History (13 Units)** Importance of history, early hominid development, agriculture communities, Early River Valley civilizations, Portuguese influence, leaders of the Protestant Reformation, Gupta Empire, Byzantine Empire, Bantu migration, Latin American independence movements, French Revolution, Revolutions of 1848, Industrial Revolution, social class, child labor, Chinese & British positions on opium trade, WWII, components of the United Nations governing body, culture and technology, tracing population growth, causes and affects of revolutions, emergence of capitalism, Nation States-globalization and immigration

**Government (6 units)** Aquinas, Aristotle, Machiavelli, Marx, Milton, Greek and roman government, Feudalism, Fascism Nazism, US constitution, Bill of Rights, executive, judicial, legislative branches. Bills- passing. judicial, legislative branches, political parties and getting involved

**Economics (6 units)** International finance, unions, labor, free enterprise, banking, savings and loans, personal finances, credit cards, IRA, stock market, purchasing cars, budgeting, trading stocks, monopolies, running a business, deregulation



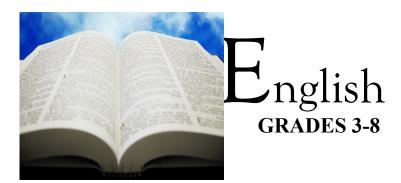


US History-Reconstruction to Present (13 Units): Compromise prior to the Civil War, Republican Party, Abraham Lincoln, First Battle of Bull Run, Bloody Shiloh, Ulysses Grant, Emancipation Proclamation, Gettysburg Address, Horace Greeley, Military Prison life during the Civil War, Economic changes to North and South, Reconstruction, President Johnson, Thirteenth, Fourteenth, and Fifteenth Amendment, equality, class, gender and religion, Industrial Revolution, Immigration, Populist Movement, Panic of 1893, Spanish-American War, Theodore Roosevelt, The Red Scare,

Harlem Renaissance, Flappers, Henry Ford, consumerism, economic conditions prior to Great Depression, Black Thursday, Rise of Nationalism, Adolf Hitler, Franklin Roosevelt, Harry Truman, The Cold War, The Korean Conflict, Post World War II America, John Kennedy, Johnson Years, Vietnam, Civil Rights movement, Women's rights, Martin Luther King, Watergate, Nixon, Clinton Presidency, Domestic Issues, September 11-2001, Immigration, Obama Presidency

**U.S. History: Foundations to Present (13 Units)** (Formerly American History) Crusades, Middle Ages, The Renaissance, Johann Gutenberg, Jamestown, John Rolfe, Martin Luther, George Washington, The first political parties, Revolution of 1800, President James Monroe, Eli Whitney's cotton gin, sectionalism, Manifest Destiny, Missouri Compromise, slavery, politics of slavery, Abraham Lincoln-First Inaugural Address, reconstruction, Industrial Revolution, Progressive Reformers, Isolationism, Nationalism, World War I, Triple Alliance, The Great Depression, The New Deal, Franklin Roosevelt, World War II, Cold Ware, Atlantic Charter, Korean Conflict, Vietnam, America in the 1960's, 1970's, 1980's, 1990's,





Language Arts 300 (10 Units) Grammar, spelling, book reports, stories, fables, reading, adjectives, punctuation, capitalization

Language Arts 400 (10 Units) Book reports, writing fables, spelling, use of dictionary, different kinds of writing, short stories and word play

Language Arts 500 (10 Units) Contractions, diphthongs, abused language, parts of speech, opinions, essays, projects

Language Arts 600 (10 Units) Adverbs, pronouns, idioms, business news story, interjections, outlines, organizing, the President's thoughts, metaphors, poems, drama

Language Arts 700 (10 Units) Building blocks, information texts, narratives, biographies, personal and business letters, public speaking, essays, critiques, more mechanics, formatting, autobiographies, character sketch

Language Arts 800 (10 Units) Strategies for writing, punctuation, essays, analyzing, propaganda, persuasive factors, formal essays, summarizing, paraphrasing, persuasive language, listening, cues, following directions, story elements, narrating, editing





# English HIGH SCHOOL

**English I (13 Units)** Word meanings, spelling, speech, prepositions, interjections, conjunctions, common errors, verb tenses, plagiarism, complex projects, persuasion, the world of business, arguments bias, contrast and comparing, SOAP, poetry, short story, Homer, Odysseus, Elizabethtown drama, Shakespeare, novels, Twenty thousand Leagues, Plots and perspective, the novel

**English II (13 Units)** Language in motion, plurals, inflections, demonstrative pronouns, antecedents, infinitives, adverb phrases, punctuation, exposition, technical instruction, analogies, roots and affixes compositions, biographies, regional dialects, getting a job, resumes, cover letters, media, television, public opinion, theme and experience, critical essay, diction and form, Greek drama, Roman drama, Pygmalion

**English III (13 Units)** Standard and nonstandard English, lexicography, appositives, subordinate clauses, Greek and Roman roots, measurement in poetry, Annabel lee, nonfiction, journals, Our Town, essay, thesis, bibliography, analyzing words, expository theme, critical analysis, Old man and the Sea

**English IV (13 Units)** Elizabethan poetry, Shakespeare, Hamlet, Bunyan, Pope, Swift, Johnson, Goldsmith, Shelley, Keats, Wordsworth, Milton Puritan literature, sensibility literature, romantic literature, medieval literature, poetry Hamlet, Canterbury Tales, 17<sup>th</sup>-19<sup>th</sup> century English literature





Mathematics 300 (10 Units) Place values, addition and carrying, money, subtraction, borrowing, fractions, shapes measurement, graphs and rounding

Mathematics 400 (10 Units) Place values, rounding, perimeters, calendars, shapes, roman numerals, multiplication and division, word problems, equations, decimals, angles fractions, short division, protractor, multiplication, division, factoring and data collection

**Mathematics 500 (10 Units)** Decimals, denominators, fractions, metric system, calculators, graphs, missing number equations

**Mathematics 600 (10 Units)** Exponential notation, prime factorization, converting fractions to decimals, reciprocals, percents, angle measurement, three dimensional shapes, composite numbers, ratios multiplying mixed numbers, mean, median and mode

**Mathematics 700 (10 Units)** Venn diagrams, sets, estimations, multiplying, dividing, metric, mixed numbers, dividing and multiplying fractions, percentages, trapezoids, protractor, graphs, equations, conversions, fractions, ratios

**Pre-algebra** (11 Units) Subsets of the real number system, using variables, The number line, comparing rational numbers, exponents, scientific notation, square roots, order of operations, expressions and equations, solving one-step and two-step equations, relations and functions, analyze graphs, integers, evaluating expressions, prime factorization and GCF, simplifying fractions, LCM and LCD, like and unlike fractions, adding and subtracting decimals, multiplying and dividing fractions, two-step equations, prime factorization, simplifying fractions, one-step and two-step inequalities, proportions, applications, direct variation, solving percent problems, applications, unit conversion, corresponding parts, indirect measure, models and scales, rewriting equations, combine like terms, intercepts, non-linear functions, geometric/exponential/recursive sequences, angles, perpendicular and parallel lines, circles, polygons, Quadrilateral Family, perimeter and circumference, area of parallelograms, area of circles, composite figures, symmetry, reflections, distance and midpoint, tessellations, dilations, central tendency and dispersion, bar/circle/line graphs, histograms, box-and-whisker plots, scatter plots, misleading graphs, appropriate displays, tree diagrams and counting principle, permutations, combinations, mixed reviews of outcomes, probability and odds, disjointed and overlapping events, independent and dependent events.







**Algebra I (13 Units)** Variables and expressions, absolute value, distributive property, coordinate plane, linear equality, slope, substitution method, polynomials, Pythagorean theorem, exponents, raising to a power, quadratic, probability, linear equations, compound inequality

**Algebra II (13 Units)** Sets, functions, graphs, algebraic expressions, multi-step equations with parenthesis, graphing solution sets for inequalities, motion problems, line graphs, point slope equations of a line, solutions by substitution, factoring trinomials, synthetic division, inverse and direct variation, joint and combined variation, multiplying and dividing with fractions, conjugates, quadratic equations, sum and product of roots, exponential functions, progressions: sequences, series, integers, the discriminate, imaginary numbers, binomial coefficients, logarithms, conditional probability

Geometry (13 Units) Sets, lines, theorems and postulates, proofs, transversals and special angles, proving triangles congruent, parallelograms, independent triangles, overlapping triangles, 30,60,90 degree triangles, sines, cosines, tangents, area of circles, solids, perpendicular lines, congruence and similarity, inverse and identity transformations, polygons, coordinates and proofs, arcs, cones, prisms, isometry, graphs of algebraic sentences, circle equation, midpoint formula

**Pre-Calculus (10 Units)** Algebraic functions, linear functions, trigonometric functions, graphs of sines and cosines, special angles, reduction formulas, inverse trigonometric functions and polar coordinates, amplitude of circular functions, phase shift of circular functions, double and half angle formulas, parabola, hyperbola, permutation of N, multiplication of probabilities, difference quotient, proofs by induction, angle between curves





### Math HIGH SCHOOL

**Integrated Math (8 Units)** Natural numbers, decimals, fractions, multiplicative inverse of a number, variables, algebraic expression, commutative and associative properties, simplifying algebraic expressions, two-step equations, distributive property, exponents, polynomials, monomial, long division, multiplying and dividing simple calculations, radicals, adjacent, vertical, complementary, and supplementary angles, transversal, parallels, classifying triangles, congruent figures, isosceles trapezoid, surface area, cylinder, sphere, central angle, arc measure in a circle,

Prime factorization, greatest common factor, factoring trinomials with leading coefficients, quadratic equation, square root property, multiplication property of inequality, inequality statements, coordinate geometry, variables, unknowns, multi-step equations, distributive property, linear equations, writing linear equations in slope-intercept form, union of two sets, graph a compound inequality, equivalent, inconsistent and consistent equations, solving linear equations, coefficients, matrices, determinants, coin and pricing problems, mean, median, and mode of a given set of data, frequency table, stem and leaf plot, extrapolate, interpolate, permutation, combination formula





### Science GRADES 3-8

**Science 300 (10 Units)** Oxygen, digestion, root hairs, seeds, animals, insects, fish, amphibians, reptiles, birds, mammals, marsupials, foods, teeth, chemistry, volume, mass, sounds, earth rotations and seasons, igneous, sedimentary, metamorphic, volcanoes, heat, molecules, liquids, gas, electricity, friction, static, sun

Science 400 (10 Units) Plants, parts of plants, animals, insects, mollusks, endangered species, conservation, ecology, decomposers, ecosystem, food chain, diorama, machines-simple and complex, Galileo, pulley, gravity, electricity, current, circuit, conductors, magnetism, Edison, water-ice gas, as solvent, atmosphere, hurricanes, tornadoes, snowstorms, weather instruments, astronomy, Isaac Newton, stars and space, Earth, air, water, land

Science 500 (10 Units) Cells, Hooke, Leeuwenhoek, protozoa, seed plants, spores, mold, yeasts, fungi, invertebrates, vertebrates, carbon cycle, terrarium, food chain, prairie land, heat energy, chemical energy, sources of energy, plate tectonics, under ground forces, reading fossils, identifying rocks, erosion, matter, skeleton, natural cycles-moon, life comets.

Science 600 (10 Units) Photosynthesis, enzymes, digestive system, mouth digestive system, circulatory system, respiratory, excretory, muscles, bones, nervous system, eye, heart, blood, ear, animal behavior, biomes, tropisms, mitosis, meiosis, embryo, DNA mutations, genetics, genes and traits, Mendel, atoms, elements, molecules, compounds, atomic number electron arrangement, diagram of atom, force, work, gasses, mechanical energy, heat energy

**Science 700 (10 Units)** Data collection, analysis, chromatography, phase changes, electric motor, Newton's Law, organs, pathogens, immune system, chronic diseases, radiation therapy, vaccinations, Karyotype, ecosystems, solar systems, evolution, Punnet squares, forensic DNA, water cycles, asteroids, extinction, taxonomy, plant kingdom

**Science 800 (10 Units)** Radioactivity, atomic nuclei, reactors, metric system, area, volume, mass, Density, earth structures, buoyancy, oceanography, turbidity, sedimentation, chemistry of the ocean, photosynthesis, biosphere, industry, transportation, space, telescopes, astronomy, populations.





### Science HIGH SCHOOL

Biology (13 Units) Taxonomy, binomial nomenclature, molecular basis of life, static electricity, covalent bonding, organic compounds, lipids, carbohydrates, enzymes, microscope, microbiology, protozoa, amoeba, algae, cell design, osmosis, anatomy and morphology of plants, sexual reproduction in animals and plants, anatomy and physiology, systems of the body, chromosomes, diseases, probability, cell division-meiosis, mitosis, asexual and sexual reproduction, food chains, ecology, biomes, quadrants

Chemistry (10 Units) Metric system, analyzing data, mass, density, colloids, gas, kinetic, propellants, pressure, temperature, mole, Avogadro's number, golden years of chemistry, atomic theory, Periodic table, Bohr Model, fission reactors, nuclear reaction, valence structure, polar covalent molecules, stoichiometry, solution concentrate, molarity, dissolving, titration of acids, bonding of carbon atoms, alkranes, reactions of unsaturated and saturated hydrocarbons, aldehydes acids and ketones, esthers, proteins and amino acids

**Physics (10 Units)** Scalars, vectors, oleic acid, rate of length change, Newton's first and second laws, Isaac Newton, Circular motion, kinetic and potential energy, power, nuclear energy, waves, pulses, bending waves, light properties, water, refraction, convergence, Galileo, acceleration, Newton's third law, conservation of momentum, explosion, Kepler's Law of Planetary motion, solar system, heat energy latent heat, thermodynamics, sound waves, Doppler, electric charges, Coulomb's Law, electric potential, sources of EMF, resistance, Ohm's Law, circuits, fields, electromagnetism, electron beams, quantum theory, x-rays, Bohr Model, nuclear theory

Earth Science: (13 Units) Explores the Earth's formation, structure, interacting systems, and place in the universe. Concepts and processes in Astronomy, Geology, meteorology and Oceanography





**Essentials:** Language Arts (5 units) Consumer materials, main idea, conclusions and predictions, evaluating an argument, business letter, literary genres, plot, theme, drama, critique, focused essay, narrative, connecting ideas through subordination, verbs, nouns and pronouns, modifiers, punctuation

**Essentials: Math (7 units)** Rational numbers, absolute value and integers, fractions, decimals, percents, fractions and factoring, exponents in scientific notation, whole number exponents, powers and roots, central tendency measures, statistics, outcomes, probabilities, independent and dependent variables, operations, exponents and roots, polynomials, inverse operations, two step equations, inequalities, measurement systems. Scale drawings, surface area, volume, geometric shapes scale factors, Pythagorean Theorem, congruent figures, analyzing problems, estimations, graphs, data, linear functions, multi step word problems, linear inequalities

**GED:** History and Geography (4 units), Language Arts (4 units), Math (8 units) and Science (4 units)

**Placements:** All 4 core areas: English Language Arts, Math, Science, and Social Studies. Test concepts grades 3-12th grade.

**Skills Diagnostic:** A combination software that tests a student's understanding of essential concepts or skills, in English Grammar and math. The product is designed to indicated high school readiness in these subjects through a series of diagnostic tests covering specific skills. The program provides remedial materials targeting each skill if test results are below a specified benchmark (threshold). The math and English Grammar remedial materials which may be assigned automatically by the application or manually by the teacher. These remedial materials provide concise summaries (mini-lessons), rather than a lengthy presentation of the concepts. After the student studies the remedial material in the skill unit, he takes a mastery test to see if he/she learned the concept.





**Business Computer Information Systems1-A:** (6 units) Communication Skills: email, netiquette, non-verbal communication, workplace habits and attitudes, giving constructive feedback, paraphrasing and summarizing, difference between hardware vs. software, CPU, harddrive, motherboard, emerging technology, keyboarding exercises, writing and editing business documents, how to write business letters, resumes, entering data into a spreadsheet, function, operation, creating a personal budget, database, basics in creating a database, organizing a database, search and queries

#### **Business Computer Information Systems 1-B: (6 units)**

Telecommunications in the workplace, using email-ethics and work habits, choosing telecommunications for business needs, Desktop Publishing-applications, types-text, graphics, project-creating an instructional manual, presentation technology: application, layout, special effects menu, toolbars, panes, views, networks: application, architecture, computer operating system: Mac, Windows, Linux, interface, programs and files

#### **Esentials of Communication:** (6 units) - Public Speaking proficiency

Components of the communication process and their functions, types of communication, functions of-guage, non-verbal communication, listening styles and barriers, interpersonal relationships, conversation management, etiquette, criticism, understanding groups, group communication, problem solving, leadership, presenting and interpreting public messages, defining the audience, research, supporting materials, speech outlining, speaking notes, rehearsing.

**High School Health (5 Units):** Building blocks, circulatory system and respiratory system, childhood development, adolescence, adulthood, nutrition, carbohydrates, fats and proteins, vitamins and minerals, proper eating habits, meat and bean group, calcium, physical fitness, muscular endurance, mental health, social health, making choices, friends, family, personal hygiene, teeth and mouth, eyes and ears, safety, personal safety, weather safety, water safety, first aid kits, extreme temperature, disease and prevention, infectious disease, health care, alcohol, tobacco, health and the environment, water and soil





Integrated Physics and Chemistry (13 units) Branches of Science, Scientific Method, units of measurement, mass, density, four states of matter, measuring heat energy, calories, latent heat of fusion, acids and bases, chemical bonding, atomic structure and bonding, synthesis reaction, decomposition reactions, nuclear energy, radioactivity, properties of solids, elasticity in solids, liquids, gases, distance, displacement, acceleration, relative motion, momentum, force, vector, friction, centripetal force, forms of energy, joule, kinetic energy, potential energy, levers, mechanical advantage, law of conservation of energy, horsepower, watt, electricity, waves, doppler effect, resonance, harmonics, properties of light, lenses, carbon dioxide and global warming, fossil fuel, atomic spectra, temperature of stars, kepler and the motion of the stars, water acidity

#### Psychology (6 units) The study of people's thoughts and behavior

fundamentals of psychology, emergence of experimental psychology, psychology schools of thought, perspectives, careers in psychology, biopsychosocial psychology, biology behind behavior, sensory processes, motivation, emotion and stress, developmental psychology, theories of development, lifespan development, personality, free will vs. determinism, cognitive psychology, learning, conditioning, memory, thinking, language, consciousness and sleep, dreams, abnormal and group behavior, mental disorders and treating, altruism, social influence and conformity, using influence

Civil War (6 units) Cultural Differences between North and South, slavery, political compromises, Kansas-Nebraska Act of 1854, violence in Kansas, John Brown, Abolitionist Movement, South seceding from the Union, confederacy, sovereignty, Anaconda Plan, Bull Run, Battle of Shiloh, Peninsular Campaign, Antietam, Battle of Fredericksburg, Chancelorsville, Jefferson Davis, Abraham Lincoln, Battle of Gettysburg, George Meade, Rose O'Neal Greenhow, Ginnie and Lottie Moon, Nancy Hart, Dr. Mary Walker, Harriet Tubman, The Black Brigade of Cincinnati, William Harvey Carney, Vicksburg, Chickasaw Bluffs, Robert E. Lee, Ulysses S. Grant, Battle of Chickamauga, Battle of Chattanooga, Wilderness Campaign, Petersburg, Atlanta Campaign, Sherman's March to the Sea, Union and Confederate Prisons, Battle of Britain





Twentieth Century American History (6 Units) Industrial Revolution, American Workforce, poor working conditions, Socialism, Labor Unions, farmers and populists, Gilded Age, urbanization, women in society, discrimination, segregation, origins of progressivism, social reform, American Imperialism, Panama Canal, Main causes of World War I, Woodrow Wilson's Fourteen Points, Red Scare, Flappers, Harlem Renaissance, Depression, Franklin Delano Roosevelt-"A New Deal for the American People", Isolationism, Nationalism, Holocaust, Origins of the Cold WarSuez Crisis, Space Race, Harry Truman, Brown v. Board of Education of Topeka, Thurgood Marshall, Little Rock Nine, Civil Rights Movement, Martin Luther King, Jr., Freedom Rides, Malcolm X, Asian, Chicano, and American Indian Movement, Watergate, Richard Nixon, Conservative Movement, Ronald Reagan, Iran-Contra Affair, Immigration, Migration, Women's Movement

Vietnam Era (6 units) Defined by the Vietnam War Origins of U.S. Involvement in Vietnam, Vietnam's geography, early history, French Indochina, colonization of Indochina, nationalist movement, freeing Vietnam from France, Vietnam during World War II, French Indochina War. Cold War, Marshall Plan, spread of communism, Dien Bien Phu, The Geneva Accords, United States military involvement, Geneva Accords, Ngo Dinh Diem as leader, Lyndon B. Johnson, Gulf of Tonkin, air and ground war, North Vietnam and South Vietnam armies, Vietcong tunnels, women and the Vietnam War, Antiwar movement, governmental debates. Tet offensive, 1968 election, Richard Nixon, Vietnamization, Invasion of Cambodia, morale and discipline, secret diplomacy and the Paris Peace Accords, Nixon and Watergate, fall of Saigon, prisoners of war, Vietnam Veterans Memorial, Vietnamese relations, Vietnam today





**Health Quest (5 units)** Body- tissues, skeleton, calcium, systems, emotional health, choices, social health, nutrition, ingredients, food pyramid, safety in the home, natural disasters, ecology, pollutions, recycling, poisoning, disease and prevention, immunizations, infectious diseases

World Geography (13 units) Globes, maps, charts, earth's layers, renewable, and nonrenewable resources, atmosphere, hydrosphere, ecosystems, human migration, settlement, developing nations, counter migration stream, pandemic, cultural mosaics, United States, Northeast and the South, Canada, Greenland, International alliances, NAFTA, NATO, and OAS, aquaculture, conservation, environmental policies, agriculture, Central America, South America, Caribbean, Oceania, Australasia, Antartica, Western Europe, Eastern Europe and Russia, Sub-Saharan Africa, North Africa, Southwest Asia, Central, South, East, and Southeast Asia

General History 900 (10 Units) Earth's composition, fertile crescent, development of civilizations, globe, northern, southern hemisphere, types of maps, axis, intersect, statistics, geographic regions, political regions, Liberty Bell, Statue of Liberty, political parties, freedom principles, National Government, Articles of Confederation, Constitution of the US, Congress, Senators, Representatives, Vice President, Cabinet, and Executive, Judicial Branch, State Government, Acquisition of Citizenship, ecological hazards, loss of agricultural farmland, urban geography, Mans responsibility for environment, diversity of occupations, career preparation

**Personal and Family Living ( 6 Units)** Personal development, tolerance, maturity, exercising self control, developing friendships, peer pressure, making decisions, consequences, identifying major sources of stress, strategies to deal with stress, family structure, family roles, positive/negative roles, four main family functions, stages of the family life cycle, golden rule, rule of five, types of stressful events, chronic stress, forming relationships, halo effect, types of attraction, working in groups, interpersonal, communication, non-verbal communication, 7-38-55 Rule, empathy, ways to express empathy, resolving conflict constructively, nutrition, nutrition in foods, Meal management, staying out of debt, loaning/saving money, driving safety, accident contributors, Financial independence, job search, types of resumes, evaluating/writing a cover letter,





**Consumer Math (10 Units)** Number skills, division, prime numbers, fractions: adding, subtracting, multiplying and dividing, real life applications: using fractions in the kitchen,

Linear measurement, Volume, weight, money, finding a job, payroll, payroll deductions, self-employment piecework, retirement planning, Measures of central tendency: Mean, median, and mode. Statistics, sets and probability, cash budget, Home Based budget, home based application, standard normal distribution, balance sheet, taxes, insurance, Banking services: Checking, Savings, ATM's, simple and compound interest, financial planning, stocks and bonds, mutual funds, wills and estates. Markups, selling price, cost per unit, comparison techniques, cost per unit, using tables for variables, buy, lease, and rent, depreciation trends, leisure, travel and retirement planning, pricing of job related services, calculating perimeter and area, trapezoids, Pythagorean Theorem, cylinders, cones, spheres, Geometry, indirect measure,

**Trigonometry (6 units)** Trigonometric functions, pythagorean theorem, inverse functions, positive angle, negative angle, cosecant, cotangent, secant, unit circle, trigonometric values, radian measure, cosine addition formula, double-angle formulas, converting between products and sums, vectors, law of sines, area of a triangle, law of cosines, navigation application, polar coordinate, polar curves, polar forms of conics, multiply and divide complex numbers, powers and Nh Roots





General Science 900 (10 Units) Structure of matter, radioactivity, Wilson's cloud chamber, nuclear composition, neutrons, beta particles, alpha particles, standard units, metric measures, sub-division of units, formula for gravitational force, buoyancy, Archimedes, densities of common substances, igneous rocks, sedimentary rocks, crust, mantle, earth layering, erosion, entrenched meanders, plate tectonics, rift valley, Neptunists vs. Plutonists, formation of fossils, crustal changes, superposition, intrusion, tree rings, radiometric ages, deep ocean research, wave and tide measurement, acoustic devices, submarines, geophysics, echo sounding, ocean coring, fish imports & exports, leading producers of fish, chemical analysis of seawater, megaliths, reflecting telescopes, space explorations, body health: germs, disease, microbiology, infections, viral infections, body defense mechanisms, medicine, drug control organizations, ecology, biosphere, formula for population growth, astronomy, space exploration, pharmacology,

**French I (12 Units)** Alphabet, accents, A diverse country, Etre: to be or not to be, masculine or feminine, In the classroom, to have, expressions with to have, school expressions, educational system in France, -er verts, infinitive construction, interrogatives structures, telling tmie, date, numbers 60-100, familial structures in France, family, possessive adjectives, interrogative expressions, friendship, adjectives, irregular adjectives, adjectives that precede the noun, leisure activites in France, hobbies, to do or to make, verbs and adverbs, sports in France, more adverbs, weather, seasons, holidays in France, numbers larger than 100, Frances National Holiday, Invitations, stemchanging verbs, stages of life, colors, direct object pronouns, let's visit the city, prepositions of place, Brittany, Paris, ordinal numbers, transportation, regular –re verbs, irregular –re verbs

French II (12 units) French stores, verb review, French products, at the French market, demonstrative adjectives, markets in the Francophone World, How much does it cost, direct object pronouns, health care professions, professions in the arts, trades, helping professions, character traits, my ideal job, young au pair girl, applying for a job, preparing for a job interview, yes sir, working in Senegal, French Cinema, which fild should we see, where are we going, let's go the movies, it's all sold out, how is the film, Cannes Film Festival, an interview with a movie star, homes, housework, in the city, rooms in the apartment, the passé compose tense with etre, on the train, houses in Provence, a day in Provence, France and nutrition, a balanced diet, nutrition around the Francophone world, physical activity, daily habits, how did you keep busy, a teen's typical routine, symptoms of an illness, at the doctor's office, where are you going, at the airport, announcements at the airport, a time capsule, it was cold in Quebec, how was your vacation, the past tenses, cultural celebrations, dressing for the weather, a fashion magazine, in the cholthing store, choosing clothing in a boutique, haute couture fashion, fashion at the beginning of the Twentieth Century, African fashion, the fine arts, art movements, art history, The Louvre Museum, more negative expressions, The impressionists, reserving a hotel, things to do on vacation, the pronoun Y, modes of transportation, Guadeloupean Food, rites of passage, childhood, events in adolescence, driver's license in Europe, simple future tense of regular verbs, simple future tense of irregular verbs, weddings, a royal wedding





Spanish I (12 units) The first words, where is Spanish spoken, alphabet, greeting people in Spanish, subject pronouns, nouns, definite articles, colors, in the classroom, verbs, opportunities to use Spanish, what we don't do, numbers, days of the week, time, formal, informal, conjugation of —er verbs, third conjugation, structure, parts of the sentence, how to begin a conversation, cultures in Mexico, let's go to the beach, Mexican hat dance, a look at the people through art, culture in the market, Sweet Fifteen Party, Mayan World, Long live Mexico and it's independence, Charlie and Sophie arrive in Buenos Aires, a family visit, a day at the park, Valley of Lerma, Inca Trail, life in the Argentinean Pampas, let's have tea, super nature: Highest waterfalls in the Americas, a day at the park, a trip West, Sophie and Charlie arrive in Honduras, Ceiba, it's cold and it rains, but it doesn't snow, Mayan world in Honduras, when? I don't understand, climate of El Salvador, arts and crafts, a day of shopping, family festival at the Town Square of Toa Baja, tourism at Pinones, National Indigenous Fetival of Jayuya, Scenery of the beach along the coast of the Island, life in Ponce, Karst Territory, camping in Vieques, Spain and my Country, another day in Mardridi, a day at the University in Salamanca, culture in Spain, a view of Central Spain, scenery of the Moors in Andalusia, let's eat in cuba, I have a headache, rhythm of Africa and the melody of Europe, Puerto Plata, Charlie and Sophie climb a mountain, let's make rice pudding

**Spanish II-a (6 Units)** Introduction to the Spanish Speaking World, Spanish in the US, why do we speak Spanish so much, what do you do every day?, potluck, to be or not to be, a fond farewell, live and learn exchange program, geography lesson, educational field trip, first day of class, P.E. class, literature class, Chilean personalities, learning another language is hard, being a teacher is hard, nature is a good teacher, land of grace, home of Simon Bolivar, Venezuelans: A melting pot of humanity, etiquette is the key to success, let's enjoy the outdoors on Margarita Island, music and dance, play ball, Peru, Macchu Picchu is a wonder, culture shock, Amazon Rainforest and Puerto Maldonado, lost in the translation, Archeologyan ideal career for Sophia, job vs. a career, professions and trades, a trip to Cartagena, Spanish influence in Colombia, absent-minded waiter





# Pre-Release

**Integrated Math II (12 Units)** Review: fractions, expressions, long division, slope, F.O.I.L, perfect cubes, substitution method, elimination method, arithmetic sequences, matrices; operation of sets, axioms, relations and functions, algebraic expressions-Exponents, multiplication and division, multi-step equations, literal expressions, graphing solution sets for inequalities, compound sentences, line graphs, slope of lines, point slopes, general equation of a line, solutions for systems of equations, solving inequalities, multiplying polynomials by polynomials, factoring trinomials, division with polynomials, synthetic division, direct variation, inverse variation, joint and combined variation, multiplying and dividing with fractions, multiplying algebraic fractions, dividing algebraic fractions, mixed expressions, complex fractions, equations with fractions, proportions, mixture problems, work problems, real numbers, Law of Radicals, conjugates, radical equations, quadratic formula, sum and product of roots, The Discriminant, imaginary numbers, exponential functions, fractional exponents, exponential equations, exponential Applications, logarithmic functions, evaluation of logarithms, mantissas, scientific notation, common logarithms, graphs of logarithmic functions, computation with logarithms, matrices, addition and multiplication of matrices, progressions: sequences, permutations-factorials, formula, applications, combination formula, applications, binomial coefficients, probability: concepts, equally likely outcomes, multiplication principle, geometric postulates, geometric theorems, angle definitions, angle measurement, angle relationship definitions, angle relationship theorems, basic properties of parallels, transversals and special angles, classifying triangle by sides and angles, exterior and remote interior angles of triangle, proofs involving triangles, polygons, congruent triangles, independent and overlapping triangles, inequality theorem, triangles that use parallelograms in proofs, trapezoids, algebra and ratios, properties of proportions, meaning of similarity: theorems and proofs, similar right triangles, The Pythagorean Theorem, 30-60-90 right triangles, using triangles: rectangular solids, using triangles: regular square pyramid, sine, cosine, and tangent ratios, Area of : polygons, rectangles, parallelograms, trapezoids, polygons, Circles: circumference, and PI, area of circles, sectors, segments, Solids: prisms, pyramids, cylinders, cones, spheres, construction: dividing a segment, Isometry: reflection, translation, rotation, product transformation, characteristics of circles and spheres, tangents, arcs, chords, theorems, Special angles: type 1, 2, and 3