



Portals

Thinkers Course Descriptions

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Portals

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It's just so convenient to have everything put together and planned out!

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We have all grown in our faith and relationship with God through our daily Bible lessons.

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Scope & Sequence

This course catalog was developed to provide you with an overview of the coursework that your middle school student will complete while participating in the Portals program. There are multiple courses in each disciplinary area. Bible, History, Literature, and English are all designed to work in concert with one another, reinforcing learning across subject areas. It is recommended that you take all of these courses together, as shown in the Scope & Sequence below. Math and Science are based on individual student placement upon entering the program, and should be selected according to each student’s developmental level and requirements determined by state regulation (if applicable).

As partners in your child's education, we encourage your input, questions, and feedback. Every aspect of Portals is designed to serve your needs, and make the organization of learning as easy as possible so you have time for the work and joy of teaching and discipleship.

May God bless you and your family abundantly!

Thinkers (Middle School)			
	School Year 2023, 2026, 2029	School Year 2024, 2027, 2030	School Year 2025, 2028, 2031
Bible	NT Survey	OT Law	OT Prophecies
History & Civics	American History: Ideas and Progress Themes	Ancient World History: Ideas and Progress	Mid & Modern World History: Ideas and Progress
Literature	Read Alouds and Readers	Read Alouds and Readers	Read Alouds and Readers
English	Family Almanac	Gazette	Novel in a Year
Science	Earth Science	Health and Nutrition	Physical Science
Math	Math U See - Zeta	Math U See - Pre-Algebra	Math U See - Algebra I

Based on individual student placement when starting the Portals program

Course Description:

This two semester sequence is the first round through the New Testament, covering Mark, John, 1 & 2 Corinthians, Galatians, 1 Thessalonians, 2 Timothy, Titus, 1 & 2 Peter, 1, 2 & 3 John. Topics covered include Jesus's life, death and resurrection; expectations, exhortations and encouragements for life in Christ; and living fully for Jesus. Students explore Jesus's calling for their lives, core theological ideas, and leadership traits for ministry in the Church. Projects include invitations to pray, opportunities to serve, strategies for study, and ideas for application. Bible readings are supplemented with digital resources that allow for further exploration. Grading is based on understanding as demonstrated in oral discussions, written assignments and project artifacts.

Concepts Covered:

Mark – Birth of Jesus, Ministry of Jesus, Crucifixion, Resurrection

John – Divinity of Jesus (expressed in his life and teachings)

1 Corinthians – Unity, Wisdom, Foundations for Life, Service, Purity, Marriage, Liberty, Spiritual Gifts

2 Corinthians – Love, New Covenant, Walking in Faith, Generosity, Endurance, Self-Reflection

Galatians – Discernment, Righteousness, Fruit of the Spirit, Blessings

1 Thessalonians – Thankfulness, Encouragement, Sanctification, Conduct

2 Timothy – Duty, Godly Strength, Boldness, Trials

Titus – Qualifications of Leaders, Living in Righteousness

1 & 2 Peter – Salvation, the Church, authority, fervent love, willingness, growth, discernment, the day of the Lord

1, 2, & 3 John – Nature of God, relationship to the world, Godly living

Example Assessments:

Church Photo Map

Spiritual Tools

New Testament
Symbols

Texts:

- The Bible (any version)
- Strong's Concordance

Course Description:

This two semester sequence has a focus on the Law of the Old Testament and the application of the Law in civic and personal life, along with God's blessings and curses to Israel and individuals. Topics covered include Deuteronomy, Job, Proverbs, Ecclesiastes, Lamentations, Nehemiah, Esther, and Jeremiah. Projects are included for each day of class and vary in kind. Bible readings are supplemented with digital resources that allow for further exploration. Grading is based on understanding as demonstrated in oral discussions, written assignments and project artifacts.

Concepts Covered:

Deuteronomy – God's Law for civic life in Israel, Laws and Principles, Consequences

Job – God's Relationship with Humans, Expectation and Circumstance, Sovereignty

Proverbs – Principles of Life (application of, and addition to, the law), Wisdom

Ecclesiastes – Life Pursuits, Practical Wisdom, and Philosophical Dispositions

Nehemiah – Governance, Application of the Law, Good vs. Evil Moral Compasses

Esther – Moral Responsibility, Citizenship, Sacrifice and Honor

Jeremiah – Moral Accountability, Citizenship, Consequences for Poor Governance

Lamentations – Repentance, Learning from Moral Failures and Shortcomings

Example Assessments:

Family Code of
Conduct

Adjudicating
Conflict

Judicial Process
Comparison

Texts:

- The Archeological Study Bible
- The Bible (any version)
- [Blue Letter Bible](#)

Course Description:

This two semester sequence has a focus on the prophetic nature of the Bible focusing on OT texts, but including NT elements. Topics covered include Isaiah, Ezekiel, Hosea, Joel, Amos, Obadiah, Micah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, Malachi. Projects are included for each day of class and vary in kind. Bible readings are supplemented with digital resources that allow for further exploration. Grading is based on understanding as demonstrated in oral discussions, written assignments and project artifacts.

Concepts Covered:

Genesis Passages – Original Covenant and Promises to Israel of Messiah

Amos and Hosea – Prophetic Word to Northern Kingdom of Israel 765 –725 B.C.

Isaiah, Micah, Nahum, Zephaniah, Habakkuk, Obadiah – Prophetic word to Judah 760–590 B.C.

Ezekiel – Prophetic word to Hebrews in Babylon 620–570 B.C.

Zechariah, Haggai, Malachi, Joel– Prophetic Word toward the return to Israel from Babylon 522 – 450 B.C.

Matthew and NT Selections – Fulfillment and Prophetic Word of Second coming of Messiah

Example Assessments:

Covenant of Israel
Chart

Messiah Chart

Second Coming
Chart

Texts:

- The Archeological Study Bible
- The Bible (any version)
- Blue Letter Bible

Course Description:

This two semester sequence is a literature-based approach to American History. Topics covered include indigenous and immigrant cultures, colonies, exploration, conflicts, major leaders, migrations, inventions, religious movements, and stories from primary documents. Students explore the founding of the United States, reasons people immigrate and migrate, the impact of hardworking individuals, the role of faith in God in American history and more. Suggested projects include painting landscapes, creating models, making homemade treats, building instruments, experimenting with old tools, visiting historical sites, listening to eye witness accounts and rediscovering past knowledge. This course uses a number of quality texts that provide a Christian perspective on historical events. Books are supplemented with digital resources that allow for further exploration. Grading is based on understanding as demonstrated in discussions, presentations, written pieces, and project artifacts.

Example Assessments:

Character Profile

Community
Service

Oral Exam

Texts:

- **America the Beautiful** - 11th Century to Present, America
- **Indian Captive** - Mid-18th Century, French and Indian War
- **Shh! We're Writing the Constitution** - 1780s, Early U.S.
- **Naya Nuki** - Late 18th Century, Before Louisiana Purchase
- **Up From Slavery** - Late 19th Century, America
- **Carry On, Mr. Bowditch** - Late 18th and early 19th centuries

Course Description:

This two semester sequence is a literature-based approach to world history from ancient history through the 16th century. Topics covered include ancient civilizations including nomadic pre-history, Egypt, Sumer, Israel, Babel, Assyria, China, Africa, Phoenicians, Babylon, Crete, Mycenaens, Persia, Greece, Americas, Rise of Rome, Aryans, Mauryans, Pax Romana, Christ, Fall of Rome, Britannia, Byzantium, India, Islam, Maori, Franks, Jihad, Charlemagne, Norse, England, Knights, Japan, Crusades, Diaspora, Mongols, Russia, Ottomans, Plague, Wars of Europe, Catholicism, Ghana/Mali, Moghuls, Exploration, Mayan/Incan, Martin Luther, Renaissance, Reformation, and Science. Students explore the differences in religious belief, culture, social structure, economy, technology across the ancient world and some of the major changes and developments that occurred. This course uses a number of texts that provide a Christian perspective on historical events. Books are supplemented with digital resources that allow for further exploration. Grading is based on understanding as demonstrated in discussions, written assignments and project artifacts.

Example Assessments:

Siege Project

World Timeline

Turning Point Essay

Texts:

- **Beyond the Desert Gate** – Ancient Rome, Persecution of Christians under Emperor Nero
- **Case for a Creator: Student Edition** – Apologetics
- **David and Goliath** – 10th century BCE, Ancient times, Valley of Elah
- **Fellowship of the Ring** – Fictional world of Middle-earth
- **I Rode a Horse of Milk White** – Contemporary poem
- **Mission to Cathay** – 13th century Mongol Empire's expansion into Eastern Europe and Asia
- **Out of the Silent Planet** – Late 1930s, Fictional version of our solar system
- ***Pilgrim's Progress** – 17th-century England

Texts Cont:

- **Seven Daughters and Seven Sons** - 9th and 10th centuries, Ancient Middle Eastern folk tale, set in Baghdad during the Abbasid Caliphate
- **Story of the World: Ancient Times** - 7000 BC - 476 AD
- **Story of the World: The Middle Ages** - 400 to 1600 AD
- ***Tales From Shakespeare: Student Edition**
- ***The Art of War** - Roughly 771 to 476 BCE, Ancient China, Late Spring and Autumn period
- **The Eagle of the Ninth** - 117 AD, Roman Britain
- **The Ghost in the Tokaido Inn** - 18th century Japan, Edo period
- **The Trojan War** - 12th or 13th century BCE, Greek mythology, The Trojan War

Course Description:

This two semester sequence is a literature-based approach to world history from ancient history through the 16th century. Topics covered include world development from the Reformation to Modern eras: Colonization, Exploration, Global Slave Trade, Abolition, Ottomans, China, India, Liberty Revolutions, Industrialization, Napoleonic Era, Imperialism, Victorian Age, Modernization, East India Trading, Missions, Terraforming, Republics, Puppet States, Stock Markets, Boxer Rebellion, Balkan States, WWI, Communism, Fascism, Socialism, WWII, Nuclear Age, Cold War, Space Age, Cultural Wars, Global Rights, Terrorism, Gulf Wars, and Current Events. Students explore the differences in religious belief, culture, social structure, economy, technology across the modern world and some of the major changes and developments that occurred. This course uses a number of texts that provide a Christian perspective on historical events. Books are supplemented with digital resources that allow for further exploration. Grading is based on understanding as demonstrated in discussions, written assignments and project artifacts.

Example Assessments:

Missionary
Research

Government
Comparison Chart

Oral Exam of Modern
History Survey

Texts:

- **Story of the World: Volumes III and IV** - Reformation to Modern Age
- **The Hiding Place**
- **Common Sense** - Political discourse of Liberty Revolutions
- **George Mueller** - Missionary biography
- **God's Smuggler** - Missionary biography
- **Cross and the Switchblade** - Missionary biography

Course Description:

This two semester sequence uses great literature to connect students with history, build on timeless themes, and expose them to quality writing. Students learn to think about the foundational truths of the past and apply them to their lives today. The literature is sequenced to complement the American History course and provide stories and examples set within those people groups studied. This allows for interdisciplinary lesson design and thematic modules. The books are supplemented with digital resources that allow for further exploration. Grading is based on understanding demonstrated in discussions, written assignments and project artifacts.

Example Assessments:

Character Profile

Author Pursuit

Courage Essay

Texts:

- **The Landing of the Pilgrims** - Early 17th century England and America
- **The Sherwood Ring** - 1775-1783, American Revolution
- **Johnny Tremain** - 1773-1775, just before the American Revolutionary War
- **The Arrow Over the Door** - 1777, American Revolution
- **Traitor** - 1775-1783, American Revolution
- **Bonanza Girl** - 1962, American West during the mid-19th century
- **Streams to the River, River to the Sea** - Early 1800s
- **The Great Little Madison** - Late 18th and early 19th centuries, Early American Politics
- **The Journeyman** - Early 1800s, New Hampshire
- **By the Great Horn Spoon** - 1849, California Gold Rush
- **The Slopes of War** - 1863, Gettysburg, Pennsylvania, American Civil War
- **Turn Homeward, Hannalee** - 1864, American Civil War
- **The Landing of the Pilgrims** - Early 17th century England and America
- **The Sherwood Ring** - 1775-1783, American Revolution
- **Johnny Tremain** - 1773-1775, just before the American Revolutionary War
- **The Arrow Over the Door** - 1777, American Revolution

Texts Cont:

- **Traitor** – 1775–1783, American Revolution
- **Bonanza Girl** – 1962, American West during the mid-19th century
- **Streams to the River, River to the Sea** – Early 1800s
- **The Great Little Madison** – Late 18th and early 19th centuries, Early American Politics
- **The Journeyman** – Early 1800s, New Hampshire
- **By the Great Horn Spoon** – 1849, California Gold Rush
- **The Slopes of War** – 1863, Gettysburg, Pennsylvania, American Civil War
- **Turn Homeward, Hannalee** – 1864, American Civil War
- **The Door Within** – Fantasy
- **Moccasin Trail** – 1840s and 1850s, Oregon Trail
- **Calico Bush** – 1743, Maine Coast, Pioneer Era
- **Jericho's Journey** – 1852, Westward Expansion
- **Swift Rivers** – 1835, Mississippi River, Jacksonian Era
- **Out of the Dust** – 1934 to 1935, Oklahoma Panhandle, Dust Bowl
- **Moonshiner's Son** – 1920 to 1933, Prohibition Era America
- **Nothing to Fear** – 1932, Great Depression
- **A Long Way From Chicago** – 1929 to 1935, Great Depression
- **The Adventures of Tom Sawyer** – 1840s, Pre-Civil War South
- **The Call of the Wild** – Late 1890s, Klondike Gold Rush
- **The Hobbit** – Fantasy
- **Big Red** – Mid-20th century, Rural America
- **The Case for Christ for Kids** – Apologetic
- **My Side of the Mountain** – Mid-20th century America
- **Rascal** – 1918–1919, Edgerton, Wisconsin
- **Whatever Happened to Penny Candy** – Various historical periods to explain different economic

Course Description:

This two semester sequence uses great literature to connect students with history, build on timeless themes, and expose them to quality writing. Students learn to think about the foundational truths of the past and apply them to their lives today. The literature is sequenced to complement the Ancient World History course and provide stories and examples set within those people groups studied. This allows for interdisciplinary lesson design and thematic modules. The books are supplemented with digital resources that allow for further exploration. Grading is based on understanding demonstrated in discussions, written assignments and project artifacts.

Example Assessments:

Storytelling

Thematic Analysis

Style Imitation

Texts:

- **A Single Shard** – 12th-century Korea, Goryeo Dynasty
- **A Wrinkle in Time** – Early 1960s Earth, Other dimensions and planets
- **Adam of the Road** – 13th century, Medieval England, Reign of King Henry III
- **Arash the Archer** – 10th century AD, Ancient Persia, Mythical king
- **Black Horses for the King** – Medieval Britain, Reign of King Arthur
- **Bruchko** – 1960s and 1970s, Colombia, Motilone people
- **Flame Over Tara** – Ancient Ireland
- **God King** –
- **Island of the Blue Dolphin** – Mid-19th century, San Nicolas Island
- **Kingdom's Dawn** – Christian allegorical fiction reminiscent of medieval Europe
- **Shadow Spinner** – Ancient Persia
- **The Book of Three** – Fantasy Prydain, Welsh mythology
- **The Golden Goblet** – 1353 to 1336 BC, Ancient Egypt, Reign of Pharaoh Akhenaten
- **The Ides of April** – First century AD, Ancient Rome, Reign of Emperor Domitian

Texts Cont:

- **The Outlaws of Sherwood** - Late 12th century, Medieval England, Reign of King Richard the Lionheart
- **The Second Mrs. Gioconda** - Late 15th century, Renaissance Italy, Leonardo da Vinci
- **The Shakespeare Stealer** - Late 16th century, Elizabethan England

Course Description:

This two semester sequence uses great literature to connect students with history, build on timeless themes, and expose them to quality writing. Students learn to think about the foundational truths of the past and apply them to their lives today. The literature is sequenced to complement the Modern World History course and provide stories and examples set within those people groups studied. This allows for interdisciplinary lesson design and thematic modules. The books are supplemented with digital resources that allow for further exploration. Grading is based on understanding demonstrated in discussions, written assignments and project artifacts.

Example Assessments:

Book Review

Epilogue Chapter

Oral Exam

Texts:

- **A Murder for Her Majesty** - Elizabeth I, England
- **Animal Farm** - Allegory
- **Around the World in Eighty Days** - World
- **Daughter of the Mountains** - Asia
- **I, Juan de Pareja** - Spain
- **Kidnapped** - Stevenson
- **The Great Gatsby** - 1920's
- **The Great Trouble** - UK
- **The Man in the Iron Mask** - France
- **Young Fu of the Upper Yangtze** - China
- **Breaking Stalin's Nose** - USSR
- **Do Hard Things** - Character Development
- **Escape Across the Wide Sea** - France
- **Habibi** - Middle East
- **In Search of Honor** - France
- **Looking for the King** - Fantasy Writing

Texts Cont:

- **Mary Jones & Her Bible** - Welsh
- **Mary, Bloody Mary** - Carolyn Meyer
- **Nory Ryan's Song** - Irish
- **Sir Kendrick and the Castle of Bel Lione** - Fantasy Writing (Series)
- **Snow Treasure** - WWII
- **Teresa of Calcutta (Series)**
- **The Good Master** - Eastern Europe
- **The King's Fifth** - Spain
- **Born in the Year of Courage**
- **The Ravenmaster's Secret: Escape from the Tower of London** - England
- **Prince Caspian**
- **Heart of Darkness**
- **Westward the Tide** - WWII

Course Description:

This comprehensive writing project centers on the compilation of an almanac. Students pick topics and prompts that interest them in various genres including descriptive, expository, scientific, poetic, technical, narrative and persuasive. Writing prompts cover topics such as nature, society, family, faith, community, current events, personal interests, politics and more. Examples include recalling a childhood memory, recording an interview with a grandparent, maintaining data on weather patterns, composing a ballad and creating a business plan. The course includes over seventy writing prompts along with twenty-four lessons in creating an almanac and editing. The mentor text for this course is the Farmer's Almanac. Grading is based on writing consistency and completion of an almanac that includes a wide variety of genres.

Example Assessments:

Daily Routine

Interview

Final Almanac

Concepts Covered:

Descriptive – Memories, nature journals, reflections

Expository – Interviews, testimonies, proposals

Scientific – Logs, predictions, data, profiles, research, studies

Narrative – Memories, news, stories, life lessons

Poetic – Aphorisms, sonnets, ballads,

Technical – How to, guides, codes, manuals

Persuasive – Debates, arguments, marketing, campaigns

Texts:

- Farmer's Almanac

Course Description:

Throughout the course of the year, learners will develop, design, and write for a monthly Gazette to exercise writing shorter pieces for an audience. The balance of writing well, while under a deadline, creates workplace experiences in the course. Students pick topics and prompts that interest their audience and write to inform and entertain an audience. Gazette editions can be thematic or generalized based on learner target audiences. Every month, the course returns learners to the planning board to cycle the publication rotation again. Grading is based on writing consistency and completion of a Gazette that includes a wide variety of genres.

Example Assessments:

Magazine #4

Magazine #7

Magazine #9

Concepts Covered:

Descriptive - Memories, nature journals, reflections

Expository - Interviews, testimonies, proposals

Scientific - Logs, predictions, data, profiles, research, studies

Narrative - Memories, news, stories, life lessons

Poetic - Aphorisms, sonnets, ballads,

Technical - How to, guides, codes, manuals

Persuasive - Debates, arguments, marketing, campaigns

Texts:

- Select examples and readings will be provided as links directly in the daily lesson plans

Course Description:

Throughout the course of the year, learners will develop, design, and write a novel. The level and depth of the novel will vary based on the developmental level of the writer and the expectations they have for the story and audience. The course is designed to introduce writers to a larger project and mapping over the course of a school year toward completion. Each module covers a different stage of the writing process and guides the writer from beginning to publication. Grading is based on writing, project management, consistency, and the completion of a novel.

Example Assessments:

Profiles

Story Outline

Novel Publication

Concepts Covered:

Module 1 – The Hero’s Journey

Module 2 – Building a Story Outline

Module 3 – Building Protagonists and Antagonists

Module 4 – Refining the Story Outline

Module 5 – Writing for the Reader

Module 6 – Advancing a Subplot and Weaving Elements

Module 7 – Rising Tension, Climax, and Resolution

Module 8 – Test Readers, Editing, and Revisions

Module 9 – Preparation for Publication

Texts:

- Select examples and readings will be provided as links directly in the daily lesson plans

Course Description:

This two semester sequence is an introduction to the general properties of the earth's geosphere, hydrosphere, and atmosphere. Topics covered include the geosphere, minerals, rocks, the rock cycle, plate tectonics, seismic waves, earthquakes, volcanoes, fossils, uniformitarianism and catastrophism, the hydrosphere, properties of water, waves, currents, tides, reservoirs, the atmosphere, temperature gradients, pollutants, weather, and space. The laboratory components include converting between metric units, breaking down rocks, refracting light waves, examining fossils, purifying water, and making wind. Grading for this course is based on the forty plus possible experiments along with sixteen content modules, review, and test assessments.

Example Assessments:

Chapter Test

Lab Sample

Final Exam

Unit Outline:

Module 1 – Earth's Shape, Chemicals, Metric System, Units, Measuring, Temperature, Density, Concentration

Module 2 – Spheres, Geosphere, Soil, Water Sorting, Physical Weathering, Chemical Weathering, Erosion, Uniformitarianism and Catastrophism

Module 3 – Minerals and Rocks, Properties of Minerals, Polymorphism, Gems

Module 4 – Igneous Rock, Sedimentary Rock, Metamorphic Rock, Rock Cycle

Module 5 – Oceanic and Continental Crust, Earth's Magnetic Field, Collisions, Plate Tectonics, Plate Movements, Convection

Module 6 – Types of Faults, Friction in Faults, Earthquakes, Seismic Waves, Reflection and Refraction, Tsunamis, Volcanoes

Module 7 – Fossils, Fossilization, Molds and Casts, Petrification, Extinction

Module 8 – Interpretation, Geological Record, Atoms and Radioactivity, Radioactive Decay, Half Life, Radiometric Dating, Geological Column, Uniformitarianism, Catastrophism, Worldwide Flood, Young-Earth Creationists

Unit Outline Cont:

Module 9 - Potassium-Argon Dating, Carbon-14 Dating, Evolution, Macroevolution

Module 10 - Molecule, Density, Freshwater, Saltwater, Hydrologic Cycle, Data

Module 11 - Waves, Tides, Surface Currents, Thermohaline Currents, Glaciers, Groundwater, Clouds

Module 12 - Air Pressure, Composition, Carbon Dioxide, Acids, Bases, pH, Temperature

Module 13 - Wind, Temperature, Global Wind Patterns, Air Masses, Clouds

Module 14 - Weather Fronts, Weather Maps, Humidity, Precipitation, Thunderstorms, Tornadoes, Hurricanes

Module 15 - Gravity, Orbit, Solar System, Sun, Moon

Module 16 - Parallax, Outside Our Solar System, Distance, Stars, Time

Texts:

- Berean Builders: Discovering Design with Earth Science

Course Description:

This two semester sequence covers human health, nutrition and living life fully. The course covers mental health, cognition, interpersonal skills, physical health, diets, exercise, disease prevention, spiritual health, and sexual education. Supplemental resources and enrichment activities are integrated by Portals Academy. Grading for this course is based on the daily experiments, chapter questions, and projects throughout the course.

This is offered as a stand alone course for those seeking another option to meet state and national standards. Individual states outside of Minnesota may have particular elements that the teacher would need to add to meet local state requirements.

Example Assessments:

Chapter Test

Lab Sample

Final Exam

Unit Outline:

Module 1 – INTRO Health, Genetics, Temperament, Health Professions

Module 2 – THOUGHTS Mental Health Science², Nervous System, Brain, Endocrine System, Mental Illnesses, Prayer, Reality and Virtual Reality, Transhumanism

Module 3 – STABILITY Neural Science, Reason, Clear Thinking, Facts vs. Fictions, Decision Making, Routines, Attention and Distraction, Autism Spectrum, Emotional Health, Communicating Emotions, Self-Control

Module 4 – INTERPERSONAL Culture and Gender, Gender Roles, Family, Media, Socialization and Indoctrination, Communication Skills, Healthy Identity Formation, Healthy Relationships, Healthy Friendships, Church Life

Module 5 – SENSES Optical Health, Auditory Health, Touch, Temperature, Taste, and Olfactory Health, Electrical Health, Worship and Praise

Module 6 – NOURISHMENT Digestion, Oral Health, Digestive System, Hydration, Spiritual Nourishment, Bible Study

Module 7 – MACRONUTRIENTS Metabolism, Diet, Carbohydrates, Glucose, Fats, Proteins

Unit Outline Cont:

Module 8 – MICRONUTRIENTS Vitamins, Minerals, Diet Balance, Packaging Details, Food Storage, Preservatives, Additives, MSGs, Sugar, Fasting

Module 9 – DIET PLANNING Calories, Balance, Nutritional Balance, Making Dietary Changes, Feasting

Module 10 – OXYGEN Respiratory System, Cardiovascular System, Blood, Heart Health, Circulation Issues, Cardiorhythm Issues, CPR and AED Instruction⁶, Vaping⁷

Module 11 – MOVEMENT Bones, Skull, Spine, Joints, Tendons, Ligaments, Muscles, Skeletal, Joint, and Muscle Issues

Module 12 – STRENGTH TRAINING Physical Fitness, Strength, Training Exercises, Aerobic Exercise, Stretching, Bible Memorization;

Module 13 – INFECTION Skin, Mucous, Immunity System, Lymphatic System, Adaptive Immunity, Immunization Choices, Shunning Sin

Module 14 – MANAGING LIFE Rest/Peace, Joy, Contentment/Longsuffering, Gentleness, Goodness, Faith, Love, Forgiveness³, Peacemaking³

Module 15 – REPRODUCTION Sexual Reproduction, Male Systems, Female Systems, Arousal, Marriage, Fertilization, Embryology, Pregnancy, Birth, Infant Nourishment, Sexually Transmitted Diseases¹, Abstinence², Sexual Abuse/Violence and “Erin’s Law”⁵.

Texts:

- Apologia: Exploring Creation with Health and Nutrition, 2nd Edition

Course Description:

This two semester sequence covers introductory physical sciences. Topics cover study of air, water, earth, weather, physics, laws of motion, gravity, forces, sound and light waves, and astrophysics. Supplemental resources and enrichment activities are integrated by Portals Academy. Grading for this course is based on the daily experiments, chapter questions, and projects throughout the course.

Example Assessments:

Chapter Test

Lab Sample

Final Exam

Unit Outline:

Module 1 – BASICS Atoms and Molecules, Metric System, Conversion

Module 2 – AIR Air and Humidity, Air Composition, Global Warming Claims, Ozone, Air Pollution, Home Air Quality

Module 3 – ATMOSPHERE Pressure, Layers, Homosphere, Temperature, Heterosphere

Module 4 – WATER Composition, Polarity, Solvent, Bonding, Cohesion, Hard and Soft Water, Water Softeners, Plumbing

Module 5 – HYDROSPHERE Parts, Ocean, Glaciers, Groundwater, Wells, Soil Moisture, Freshwater, Atmospheric Water; Clouds

Module 6 – EARTH Lithosphere, Crust, Mantle, Core, Plate Tectonics, Stratification, Earthquakes, Mountains, Volcanoes

Module 7 – WEATHER Influences, Clouds, Thermal Energy, Latitude/Longitude, Distribution, Air Masses

Module 8 – WEATHER PREDICTION Precipitation, Thunderstorms, Tornadoes, Hurricanes, Weather Maps, Prediction, Home HVAC Systems

Module 9 – PHYSICS Introduction, Motion, Force, Energy, Speed, Direction, Velocity, Gravity, Acceleration

Module 10 – NEWTON'S LAWS Newton, First Law of Motion, Second Law of Motion, Third Law of Motion

Module 11 – GRAVITATIONAL FORCE Gravity, Circular Motion, Friction

Unit Outline Cont:

Module 12 – ELECTROMAGNETIC FORCE Maxwell, Electromagnetic, Photons, Charge, Circuits, Resistance, Magnetism, Home Electronics

Module 13 – ATOMIC FORCE Structure of Atom, Table of Elements, Radioactivity, Radioactive Decay, Radioactive Dating

Module 14 – WAVES AND SOUND Sound Waves, Speed of Sound, Wavelengths, Doppler Effect, Volume, Amplitude

Module 15 – LIGHT Wavelength and Frequency, Reflection, Refraction, Lenses, Human Perception, Color, Lumens

Module 16 – ASTROPHYSICS Sun, Nuclear Energy, Stars, Distances, Galaxies, Expansion

Texts:

- Apologia: Exploring Creation with Physical Science

Course Description:

This is an approximately 30 week course using Math U See text Zeta. Supplemental resources and enrichment activities are integrated by Portals Academy. Assessment for this course is based on chapter tests.

Math U See Description: “Zeta extends the student’s concept of place value to the right of the decimal point. Students learn to complete core operations with decimals. The connection between fractions and decimals is presented.”

Unit Outline:

Lesson 1 – Exponents

Lesson 2 – Place Value

Lesson 3 – Decimal Numbers

Lesson 4 – Add Decimals

Lesson 5 – Subtract Decimals

Lesson 6 – Metric, Greek Prefix

Lesson 7 – Metric, Latin Prefix

Lesson 8 – Metric Conversions 1

Lesson 9 – Multiply by Tenths

Lesson 10 – Multiply by Hundredths

Lesson 11 – Finding a Percentage

Lesson 12 – Finding a Percentage >100%

Lesson 13 – Percentages – Pie Graph

Lesson 14 – Multiply Decimals

Lesson 15 – Metric Conversions 2

Lesson 16 – Area of a Circle

Lesson 17 – Decimal Divided Number

Lesson 18 – Number Divided Decimal

Lesson 19 – Solve Unknown

Lesson 20 – Decimal Divided Decimal

Lesson 21 – Decimal Divided Decimal

Lesson 22 – Solve Unknown 2

Lesson 23 – Convert Any Fraction

Lesson 24 – Decimals, Rational

Lesson 25 – Mean, Median, Mode

Lesson 26 – Probability

Lesson 27 – Points, Lines, Rays

Lesson 28 – Planes, Symbols

Lesson 29 – Angles

Lesson 30 – Types of Angles

Texts:

- Math-U-See Zeta Universal Set

Course Description:

This is an approximately 30 week course using Math-U-See Pre-Algebra text. Supplemental resources and enrichment activities are integrated by Portals Academy. Assessment for this course is based on chapter tests.

Math U See Description: “Pre-Algebra teaches basic rules of solving equations using the associative, commutative, and other properties. Simple operations with polynomials are demonstrated with place-value blocks for conceptual understanding before being taught conventionally. Geometry concepts include surface area, volume, and the Pythagorean theorem.”

Unit Outline:

Lesson 1 – Negative Numbers, Addition

Lesson 2 – Negative Numbers, Subtraction

Lesson 3 – Negative Numbers, Multiplication

Lesson 4 – Negative Numbers, Division

Lesson 5 – Exponents

Lesson 6 – Place Value

Lesson 7 – Negative Numbers with Exponents

Lesson 8 – Roots and Radicals

Lesson 9 – Unknowns, Additive Inverse

Lesson 10 – Pythagorean Theorem

Lesson 11 – Associative and Commutative

Lesson 12 – Distributive Property

Lesson 13 – Solve, Multiplication Inverse

Lesson 14 – Solve, Order of Operations

Lesson 15 – Surface Area of Solids

Lesson 16 – Linear Measure with Mixed Numbers

Lesson 17 – Convert Fahrenheit to Celsius

Lesson 18 – Absolute Value

Lesson 19 – Ratio and Proportion

Lesson 20 – Similar Polygons

Lesson 21 – Least Common Multiple

Lesson 22 – Greatest Common Factor

Lesson 23 – Polynomials, Addition

Lesson 24 – Volume of a Cylinder

Lesson 25 – Polynomials, Multiplication

Lesson 26 – Adding and Subtracting Time

Lesson 27 – Volume of a Pyramid and a Cone

Lesson 28 – Military Time, Addition and Sub.

Lesson 29 – Measurement, Addition, and Sub.

Lesson 30 – Irrational Numbers

Texts:

- Math-U-See Pre-Algebra Universal Set

Course Description:

This is an approximately 30 week course using Math-U-See Pre-Algebra text. Supplemental resources and enrichment activities are integrated by Portals Academy. Assessment for this course is based on chapter tests.

Math U See Description: "Algebra I: Principles of Secondary Mathematics challenges students to continue building in-depth knowledge in preparation for a more advanced study of math. Core algebraic topics and objectives are presented and addressed as students become fluent in mathematical language, problem styles, and problem-solving and reasoning skills."

Unit Outline:

Lesson 1 – Commutative/Associative Properties

Lesson 2 – Order of Operations/Absolute Value

Lesson 3 – Solve for Unknown w/ One Variable

Lesson 4 – Distributive Property

Lesson 5 – Number Lines/Cartesian Coordinates

Lesson 6 – Graphing a Line

Lesson 7 – Slope-Intercept Formula

Lesson 8 – Graphing a Line

Lesson 9 – Graphing Parallel Lines

Lesson 10 – Graphing Perpendicular Lines

Lesson 11 – Finding Slope-Intercept Formula

Lesson 12 – Graphing Inequalities

Lesson 13–15 – Solving Simultaneous Equations

Lesson 16 – Coin Problems

Lesson 17 – Consecutive Integers

Lesson 18 – Multiplication/Division

Lesson 19 – Exponents

Lesson 20 – Addition/Multiplication of Polynomials

Lesson 21 – Factor Polynomials

Lesson 22 – Factoring Trinomials w/ Coefficients

Lesson 23 – Factoring Trinomials

Lesson 24 – Square Roots/Dividing Polynomials

Lesson 25 – Difference of Two Squares

Lesson 26 – Repeated Factoring of Polynomials

Lesson 27 – Solving Equations with Factoring

Lesson 28 – Unit Multipliers

Lesson 29 – Square Unit Multipliers

Lesson 30 – Metric Conversions

Lesson 31 – Fractional Exponents

Lesson 32 – Significant Digits/Scientific Notation

Lesson 33 – Bases Other than Ten

Lesson 34 – Graphing a Circle/Ellipse

Lesson 35 – Graphing a Parabola/Hyperbola

Texts:

- Math-U-See Algebra I: Principles of Secondary Mathematics*

*Option to use Math-U-See Algebra I: Legacy Edition in place of revised version. Lessons and content may vary. Please review state legislation to ensure materials meet education requirements



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