

**Growers Course Descriptions** 

### **Contact Us**



info@portalsedu.com



(612) 356-7376





## **Table of Contents**

- 2 Scope & Sequence
- 3 Bible
- 6 History
- 10 Literature

- 16 English
- 19 Science
- 22 Math

This course catalog was developed to provide you with an overview of the coursework that your late elementary 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 is based on individual placement upon entering the program, and should be selected according to developmental level. Science courses can be selected based on personal preferences or 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!

	Growers (Late Elementary)		
	School Year (Y1) 2023, 2026, 2029	School Year (Y2) 2024, 2027, 2030	School Year (Y3) 2025, 2028, 2031
Bible	NT Survey	OT Law	OT Prophecies
History & Civics	American History: Events and Eras	Ancient World History: Events and Eras	Mid & Modern World History: Events and Eras
Literature	Read Alouds and Readers	Read Alouds and Readers	Read Alouds and Readers
English	Family Almanac	Gazette	Short Story Writing
Science	Earth Science	Anatomy	Astronomy
Math	Math U See - Gamma	Math U See - Delta	Math U See - Epsilon

# **Bible: New Testament Survey**

## 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. Growers are building reading and writing skills and focus on developing a broad sense of content. 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:**

**Gospel Sharing** 

**Speaking Life** 

**Ministry Project** 

- Egermeier's Bible Storybook
- The Bible (any version)

## **Bible: Old Testament Law**

## 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. Growers are building reading and writing skills and focus on developing a broad sense of content. 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

Decision Making
Guide

- Egermeier's Bible Storybook
- The Bible (any version)

# **Bible: Old Testament Prophecies**

### **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. Growers are building reading and writing skills and focus on developing a broad sense of content. 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** 

**Ministry Project** 

### Texts:

• The Bible (any version)

# **History: American History**

### **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:**

**Event Essay** 

**Eras Timeline** 

**Oral Exam** 

- The Landmark History of the American People 17th to 20th Century America
- The Lewis and Clark Expedition 1804-1806, Louisiana Purchase
- The White House is Burning 1814, War of 1812
- All Sail Set 1851
- The Lion, the Witch and the Wardrobe WWII, Fictional Land of Narnia

# **History: Ancient World History**

## **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 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, written assignments and project artifacts.

## **Example Assessments:**

**Event Essay** 

**Eras Timeline** 

**Oral Exam** 

- Children's Homer 12th century BCE, Trojan War, Mycenaean Civilization
- Crispin 14th century, medieval England, aftermath of the Black Death
- Hittite Warrior 13th century BCE, Ancient Anatolia, Hittite Civilization
- King Arthur Late 5th and early 6th centuries, Ancient Britain, Dark Ages
- Mara, Daughter of the Nile 15th century BCE, ancient Egypt, Reign of Queen Hatshepsut
- Otto of the Silver Hand 13th or 14th century, Medieval Germany, Middle Ages
- Persia's Brightest Star Persia

# History: Ancient World History

### **Texts Cont:**

- Robin Hood 1189-1199, Medieval England, Reign of King Richard the Lionheart
- Story of the World: Ancient Times 7000 BC 476 AD
- Story of the World: The Middle Ages 400 to 1600 AD
- The Bronze Bow First century AD, Roman-occupied Israel
- The Land I Lost -1940s and 1950s Vietnam, World War II
- The Princess and the Goblin Allegorical fantasy

# History: Mid & Modern World

### **Course Description:**

This two semester sequence is a literature-based approach to world history from ancient history through the 16th century. Topics covered include Exploration, Colonization, the Age of Empire, Ottomans, Asia, India, the wars of Europe, Victorian Age, Modernization, Rise of Republics, WWI, Fascism, Communism, Socialism, WWII, Nuclean Age, Cold War, Culture Wars, Space Age, Civil Rights, Terrorism, Gulf Wars, Geography, Map Memorization, Charts and Graphs. 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 texts that provide a Christian perspective on historical events. Books are supplemented with digital resources that allow for further exploration. Growers focus on building reading, writing, geography, and vocabulary skills throughout the year in the context of world history. Extra readings provide story samples for the Writing curriculum at the Grower level. Grading is based on understanding as demonstrated in discussions, written assignments and project artifacts.

## **Example Assessments:**

**Event Essay** 

**Eras Timeline** 

Oral Exam of Modern History Survey

- Story of the World: Early Modern Times
- Story of the World: Modern Age
- Around the World in a Hundred Years
- Gladys Aylward
- William Wilberforce: God's Politician

# Literature: American History

## **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. Themes include genre, main character, plot, metaphor, story telling, poetry, and use of images. 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:**

**Impact Essay** 

What If Essay

**Oral Exam** 

- The Sign of the Beaver 1768, Wilderness of Maine
- Squanto: Friend of the Pilgrims 1620, Plymouth, Massachusetts
- Sing Down the Moon 1860's, American Southwest, The Long Walk
- The Witch of Blackbird Pond 1680's, New England
- The Matchlock Gun 1756, French and Indian War
- The Skippack School 18th century, Pennsylvania Colony
- Justin Morgan Had a Horse 1790's 1810's, Vermont
- The Cabin Faced West 1784, Western Expansion
- George Washington: Our First Leader 1700's
- Alamo All-Stars 1836, Texas Revolution
- Across Five Aprils 1861 to 1865, Southern Illinois, American Civil War
- Freedom Train 1950s to the mid-1960s, Civil Rights Movement, U. S.
- Who Was George Washington Carver?
- Caddie Woodlawn 1860s, American Civil War
- Sarah, Plain and Tall 1800s, Midwestern United States

# Literature: American History

#### **Texts Cont:**

- Sarah Whitcher's Story June 1783, American Revolutionary War
- Riding the Pony Express 1860 to 1861, American West
- The Wright Brothers Late 1890s and 1903, Kitty Hawk, North Carolina
- Little Britches 1906 to 1912, American West
- Robert Fulton Mid-18th century to the early 19th century,
- Farmer Boy 1866-1867, Rural America
- The Great Turkey Walk 1860, American Frontier
- Henry Reed, Inc. Mid-1950s, Post-War Suburban America
- Mrs. Frisby and the Rats of NIMH Modern Time Period, Rural Environment
- Charlotte's Web Mid-20th Century, Rural America
- McBroom's Wonderful One-Acre Farm Timeless, Whimsical Setting
- The Borrowers Late 19th or Early 20th Century
- Thimble Summer 1930s, Depression-Era Rural Wisconsin
- Room One Modern Time Period, Rural America
- What Were the Twin Towers? 2001, America

# Literature: World History

### **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. Themes include genre, main character, plot, metaphor, story telling, poetry, and use of images. 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:**

**Greek Myth Writing** 

What If Analysis

**Oral Exam** 

- A Question of Yams Rural African village
- Arabian Nights Middle Eastern folk tales compiled during the Islamic Golden Age
- Archimedes and the Door of Science 323 to 1st century BCE, Ancient Greece, Hellenistic Period
- Beat the Story-Drum, Pum-Pum African Folktales
- Call it Courage Pacific Islands, Pre-European Contact
- Castle Diary 13th century, Medieval England, Reign of King Edward I
- Catherine, Called Birdy 13th century, Medieval England
- King of the Wind 18th century, primarily in England
- The Beduins' Gazelle Early 20th century, Arabian desert, Decline of the Ottoman Empire
- The Corn Grows Ripe 18th or 19th century, Highlands of Guatemala, Spanish colonial rule
- The Door in the Wall Late 14th century, Medieval England, Reign of King Richard II
- The Great and Terrible Quest Medieval Fantasy World
- The Mystery of the Roman Ransom Ancient Rome

# Literature: World History

### **Texts Cont:**

- The Pharaohs of Ancient Egypt 3100 to 30 BCE, Ancient Egypt
- The Samurai's Tale 16th century, Feudal Japan, Sengoku period
- The Sword in the Tree Medieval period, Arthurian England
- The Viking Adventure Late 8th to late 11th century, Viking Age
- Theras and His Town 15th century BCE, Ancient Greece
- **Time Cat** Fantasy ranging from ancient Egypt to medieval Japan
- White Stallion of Lipizza Late 18th century, Austrian Empire
- Wisdom and the Millers: Proverbs for Children

## Literature: Modern

### **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. Themes include genre, main character, plot, metaphor, story telling, poetry, and use of images. 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:**

TBD

TBD

TBD

- Anne of Green Gables 19th Century Canada
- Black Beauty 19th Century
- Light of Mine Fantasy, Farmstead
- Miracles on Maple Hill 20th Century
- Rip Van Winkle and the Legend of Sleepy Hollow Fantasy
- Swiss Family Robinson 19th Century East Indies
- The Winged Watchman WWII Holland
- Treasure Island 18th Century Fantasy
- Walk the World's Rim 16th Century Mexico
- A Letter to Mrs. Roosevelt
- Cheaper by the Dozen
- A Christmas Carol
- From the Mixed-Up Files of Mrs. Basil E. Frankweiler
- Helen Keller

## Literature: Modern

### **Texts Cont:**

- Hero Over Here
- Old Yeller
- On the Edge of the Dark Sea of Darkness
- Pedro's Journal
- Plain Girl
- The Secret Garden
- The Great Wheel
- The Little Riders
- The Penderwicks
- The Seventeenth Swap
- Wind in the Willows
- Poems for Memorization

# **English: Almanac**

## **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

# **English: Gazette**

### **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 an almanac 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

# **English: Short Story Writing**

## **Course Description:**

Throughout the course of the year, learners will develop, design, and write a short story, preparation for thinkers and leader novel writing. The level and depth of the story 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, year long, project/s 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. Growers are to focus on the use of language, punctuation, spelling, vocabulary, and character development. Grading is based on writing, project management, consistency, and the completion of a story.

## **Example Assessments:**

Character and Location Profiles Descriptive Paragraph

**Final Revisions** 

### **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



# Science: Anatomy

## **Course Description:**

This two semester sequence is designed for elementary students using the Charlotte Mason method. Topics are listed below and the course includes additional activities to complement the text Exploring Creation with Human Anatomy and Physiology by Jeannie Fulbright. Supplemental resources and enrichment activities are integrated by Portals Academy. Grading for this course is based on the seventy-five plus possible experiments.

## **Example Assessments:**

**Chapter Test** 

Lab Sample

**Science Journal** 

### **Unit Outline:**

Module 1 - Introduction to Human Anatomy and Physiology

Module 2 - The Skeletal System

Module 3 - The Muscular System

Module 4 - The Digestive and Renal Systems

Module 5 - Health and Nutrition

Module 6 - The Respiratory System

Module 7 - Life in the Blood

Module 8 - The Cardiovascular System

**Module 9** - The Nervous and Endocrine Systems

Module 10 - The Nervous System Extended

Module 11 - Your Senses

Module 12 - The Integumentary System

**Module 13** - The Lymphatic and Immune Systems

Module 14 - Growth and Development

### Texts:

Apologia: Exploring Creation with Human Anatomy and Physiology

# Science: Astronomy

## **Course Description:**

This two semester sequence is designed for elementary students using Apologia's Exploring Creation with Astronomy 2nd Edition by Jeannie Fulbright. Supplemental resources and enrichment activities are integrated by Portals. Grading for this course is based on the possible experiments, chapter tests, and oral conversations.

### **Example Assessments:**

**Chapter Test** 

Lab Sample

**Science Journal** 

### **Unit Outline:**

Module 1 - Introduction, sky, starts, planets, navigation, solar system

Module 2 - The sun, stars, size, distance, brilliance, heat, revolve and rotate, flares

Module 3 - Mercury

Module 4 - Venus

Module 5 - Earth, tilt, seasons, balance

Module 6 - The moon, reflection, eclipses, gravity, travel

Module 7 - Mars

**Module 8** - Space rocks, comets, meteors, asteroids

Module 9 - Jupiter

Module 10 - Saturn

Module 11 - Uranus

Module 12 - Neptune

Module 13 - Kuiper belt, dwarf planets, Ceres, Pluto, Eris, Makemake, Haumea

**Module 14** - Stars, galaxies, black holes, supernovas, constellations, history of space travel, NASA, current events

### Texts:

Apologia: Exploring Creation with Human Anatomy and Physiology

## **Math: Gamma**

## **Course Description:**

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

Math U See Description: "Once students have mastered the concepts of addition and subtraction (covered in Alpha and Beta), they are ready for multiplication. Gamma teaches single-digit facts and multiple-digit multiplication skills."

### **Unit Outline:**

**Lesson 1** - Rectangles, Factors, and Products

**Lesson 2** - Multiply by 1 and 0, Commutative Property

**Lesson 3** - Skip Count by 2, 5, and 10

**Lesson 4** - Multiply by 2, 1 Quart = 2 Pints

**Lesson 5** - Multiply by 10, 10 Cents = 1 Dime

**Lesson 6** - Multiply by 5, 5 Cents = 1 Nickel

Lesson 7 - Area of a Rectangle and a Square

Lesson 8 - Solve for an Unknown

**Lesson 9** - Skip Count by 9, Equivalent Fractions

**Lesson 10** - Multiply by 9

**Lesson 11** - Skip Count by 3

**Lesson 12** - Multiply by 3, 3 Feet = 1 Yard

Lesson 13 - Skip Count by 6, Equivalent Fractions

Lesson 14 - Multiply by 6

**Lesson 15** - Skip Count by 4, 4 Quarts = 1 Gallon

**Lesson 16** - Multiply by 4, 4 Quarters = 1 Dollar

**Lesson 17** - Skip Count by 7, Multiples of 10

**Lesson 18** - Multiply by 7 and by Multiples of 100

**Lesson 19** - Skip Count by 8, 8 Pints = 1 Gallon

Lesson 20 - Multiply by 8

**Lesson 21** - Multiple-Digit Multiplication

**Lesson 22** - Rounding to 10, 100, and 1,000

Lesson 23 - Double-Digit Times Double-Digit

Lesson 24 - Double-Digit with Regrouping

Lesson 25 - Multi-Digit Multiplication,

Regrouping

**Lesson 26** - Finding Factors, 25 cents = 1

Quarter

**Lesson 27** - Place Value Through Millions

Lesson 28 - More Multiple-Digit Multiplication

**Lesson 29** - Prime and Composite Numbers

**Lesson 30** – 5,280 Ft = 1 Mile; 2,000 Lbs = 1 Ton

### Texts:

Math-U-See Gamma Universal Set

## Math: Delta

## **Course Description:**

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

Math U See Description: "Division is presented as the inverse of multiplication. Single-digit division facts are learned, and the concepts of division and place value are applied when solving long division problems."

### **Unit Outline:**

Lesson 1 - Rectangles, Factors, and Product

**Lesson 2** - Division by 1 and 2, Symbols

**Lesson 3** - Division by 10, Third Symbol

**Lesson 4** - Division by 5 and 3

**Lesson 5** - Parallel and Perpendicular Lines, Angles

Lesson 6 - Division by 9

**Lesson 7** - Finding Area of a Parallelogram

Lesson 8 - Division by 6

Lesson 9 - Finding the Area of a Triangle

**Lesson 10** – Division by 4

**Lesson 11** - Finding the Average

**Lesson 12** - Division by 7 and 8

Lesson 13 - Finding the Area of a Trapezoid

Lesson 14 - Thousands, Millions, and Place-

Value Notation

**Lesson 15** - Billions, Trillions, and Expanded Notation

**Lesson 16** - Division by Single Digit w/ Remainder

**Lesson 17** - Upside Down Multiplication

Lesson 18 - Division with Double-Digit Factors

Lesson 19 - Division, Three Digit by One Digit

**Lesson 20** - Division, Three Digit by One Digit

**Lesson 21** - Rounding to 10, 100, 1,000 and Estimation

**Lesson 22** - Division, Three Digit by Two Digit

Lesson 23 - Division, Four Digit by One Digit

**Lesson 24** - Division, Four Digit by Two Digit

**Lesson 25** - Division, Multiple Digit by Multiple Digit

**Lesson 26** - Volume

**Lesson 27** - Fraction of a Number

Lesson 28 - Roman Numerals: I, V, X, L, and C

**Lesson 29** - Fraction of One

**Lesson 30** - Roman Numerals: D, M, Multiples of 1,000

### Texts:

Math-U-See Delta Universal Set

# **Math: Epsilon**

## Course Description:

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

Math U See Description: "In previous lessons, students have learned basic operations with whole numbers. Epsilon covers these same operations with fractions. Fractions are presented in an intuitive way with visual explanations of equivalent fractions, common denominators, and fractions and numbers larger than one. Fractions and operations are illustrated using our proprietary Fraction Overlay manipulatives."

### **Unit Outline:**

Lesson 1 - Fraction of a Number

**Lesson 2** - Fraction of One

**Lesson 3** - Add and Subtract Fractions

**Lesson 4** - Equivalent Fractions

Lesson 5 - Addition and Subtraction - Unequal

Denominators

Lesson 6 - The Rule of Four Multi-Step Word

**Problems** 

**Lesson 7** - Comparing Fractions w/ Rule of Four

**Lesson 8** - Adding Multiple Fractions

**Lesson 9** - Multiplying Fractions

**Lesson 10** - Dividing Fractions with the Rule of Four

**Lesson 11** - Finding Common Factors and

Divisibility

**Lesson 12** - Simplifying Fractions-Common

**Factors** 

**Lesson 13** - Simplifying Fractions - Prime Factors

Lesson 14 - Linear Measure

**Lesson 15** - Mixed Numbers and Improper Fractions

Lesson 16 - Linear Measure with Mixed Numbers

Lesson 17 - Addition and Subtraction of Mixed

**Numbers** 

**Lesson 18** - Addition of Mixed Numbers

**Lesson 19** - Subtraction of Mixed Numbers

**Lesson 20** - Subtraction of Mixed Numbers

**Lesson 21** - Adding Mixed Numbers

**Lesson 22** - Subtracting Mixed Numbers

**Lesson 23** - Dividing Fractions and Mixed Numbers

**Lesson 24** - Solving for an Unknown

**Lesson 25** - Multiplying Mixed Numbers

Lesson 26 - Solving for an Unknown

Lesson 27 - Area and Circumference of a Circle

**Lesson 28** - Solving for an Unknown

**Lesson 29** - Fractions to Decimals to Percents

**Lesson 30** - More Solving for an Unknown

### Texts:

• Math-U-See Epsilon Universal Set







