

# FOUNDERS CLASSICAL ACADEMY PROGRAM GUIDE

# <u>Kindergarten History - Year at a Glance</u>

 $\begin{tabular}{ll} \begin{tabular}{ll} History Text: {\it Everything Your Kindergartener Needs to Know} \\ \begin{tabular}{ll} Geography Text: {\it Kids World Atlas} \\ \end{tabular}$ 

#### First Semester

Month	Торіс	Texts
August	HISTORY	
	USA: Pledge and Flag (Betsy Ross) TX: Pledge and Flag	
September	HISTORY	
	July 4th, Liberty Bell, Statue of Liberty Your Country, The American Flag, Our Country Long Ago	WK pp. 171-177
	GEOGRAPHY	
	Planet Earth, Oceans, and Continents Earth's Seven Continents, Which way are you going?, North and South Poles, Seven Continents/Compass Rose	WK pp. 148-151 WK pp. 151-155
	Historical Date: July 4th	

October	HISTORY	
	Christopher Columbus, Reaching Land	<i>WK</i> pp. 182-188
	GEOGRAPHY	
	North America Europe	WK pp. 162-164 WK pp. 158-159
	Students Can Label: North America, Pacific, Atlantic, and Arctic Oceans, Europe	
November	HISTORY	
	The First Americans, Homes in the Desert, Homes by the Sea North American Indians	<i>WK</i> pp. 178-181
	Pilgrims in the New World	WK pp. 189-193; The Thanksgiving Story - Alice Dalgliesh
	Commit to Memory: 1620 - Pilgrims settle Plymouth Colony	
December	GEOGRAPHY	TATIV.
	South America	WK pp. 165-166
	Student Can Label: South America, Atlantic & Pacific Oceans	

Month	Topic	Text Reference
January	HISTORY	
	TX History - Stephen F. Austin and Jose Antonio Navarro	
	<b>GEOGRAPHY</b> Australia	WK pp. 167-168
	Students Can Label: Australia, Indian & Pacific Oceans	
February	HISTORY	
	Happy Birthday, America!; Not Completely Free	<i>WK</i> pp. 194-200
	George Washington	WK pp. 200-202 A Picture Book of George Washington - David Adler Who Was George Washington? - Roberta Edwards
	Thomas Jefferson: The Idea Man	WK pp. 202-203 A Picture Book of Thomas Jefferson - David Adler
	Abraham Lincoln: Honest Abe	WK pp. 204-205 Abraham Lincoln - d-Aulaire A Picture Book of Abraham Lincoln - David Adler Who Was Abraham Lincoln? - Roberta Edwards
	Theodore Roosevelt: The Teddy Bear President	WK pp. 205-206 Who Was Theodore Roosevelt - David Adler

	GEOGRAPHY	
	Antarctica, The Arctic, North & South Pole Animals (Project, Presentations)	WK p. 169
March	HISTORY	
	Honoring Our Presidents, Choosing Our Presidents, Mount Rushmore Community Helpers	<i>WK</i> pp. 207-208
	GEOGRAPHY	
	Africa	<i>WK</i> pp. 160-161; <i>KWA</i> pp. 48-61
	Student Can Label: Africa, Indian & Atlantic Oceans Commit to Memory: July 4, 1776 - Congress Patifies the Deslaration of Independence	
	Ratifies the Declaration of Independence	
April	HISTORY	
	Maps and globes (final Review), Five Oceans	
	GEOGRAPHY	THE CONTRACTOR OF THE CONTRACT
	Asia Southwest, Central, & Southeast Asia, Far East	<i>WK</i> pp. 156-157 KWA pp. 62-89
	Students Can Label: Asia, Indian & Pacific Oceans	
May	HISTORY	
	Town, State, Country, Human Culture/Needs	

# <u>Kindergarten Literature - Year at a Glance</u>

Month	Student Text	Read Aloud	<b>Poetry</b> (Everything Your Kindergartner Needs to Know)
August	Fox Makes Friends, Goldilocks and the Three Bears, Brown Bear, If You Give a Mouse a Cookie, The Bear Went Over the Mountain, Blueberries for Sal	Mike Mulligan	Hot Cross Buns; Three Blind Mice; Mary had a Little Lamb
September	Johnny Appleseed, The Little Red Hen, The Bremen Town Musicians, Corduroy, 10 Apples Up on Top, If you Give a Pig a Pancake, Chrysanthemum, Tops and Bottoms, The Lion and The Mouse Johnny Appleseed	Mrs. Piggle Wiggle	Roses are Red, Mary Mary Quite Contrary, Humpty Dumpty, See-Saw Margery Daw, Ring Around the Rosey, Hickory Dickory Dock
October	Snow White, The Rainbow Fish, Caps for Sale,The Farmer in the Dell, Cinderella, The Very Grouchy Ladybug, Madeline, If you Give a Cat a Cupcake, Old MacDonald	Mr. Popper's Penguins	Mary Had a Little Lamb, Peter, Peter Pumpkin Eater, Old Mother Hubbard, To-Market-to- Market, One Two Buckle My Shoe, London Bridge
November	The Farmer in the Dell, Cinderella, The Very Grouchy Ladybug, Madeline, If you Give a Cat a Cupcake, Old MacDonald		Jack and Jill; Old King Cole
December	The Dog and His Shadow, (The Gingerbread Man, The Gingerbread Boy, The GingerBread Cowgirl, The Gingerbread), If You Give a Moose a Muffin	The Velveteen Rabbit	There was a Little Girl; Little Jack Horner; The More it Snows

# Learn by Heart

Month	Sayings	Recitation
August	The early bird gets the worm	"Time to Rise" - Robert Louis Stevenson
September	Great oaks from little acorns grow	"Tommy"
October	It's raining cats and dogs	"Gathering Leaves" - Robert Frost "Early to Bed" - Benjamin Franklin
November	Do unto others as you would have them do unto you	
December	A dog is a man's best friend	"I Do Not Mind You, Winter Wind" - Jack Prelutsky

Month	Student Text	Read Aloud	Poetry
January	King Midas and the Golden Touch, The Mitten, The Hat, Armadillo Rodeo, The Legend of the BlueBonnet, This Old Man, Katy and the Big Snow, The Grasshopper and the Ants	Charlie and the Chocolate Factory	Three Little Kittens, Little Boy Blue
February	Chicken Little, The Wolf and the 7 Little Kids, Kookaburra, The Three Little Pigs		Georgie Porgie; There Was an Old Woman; Simple Simon; My Nose
March	The Tortoise and the Hare, The Three Billy Goats Gruff, Tug of War, How Many Spots Does a Leopard Have?, The Very Hungry Caterpillar, Me on the Map, The Ugly Duckling, Make Way for Ducklings	Beatrix Potter: The Complete Tales	Diddle, Diddle, Dumpling; Jack be Nimble; Hey Diddle Diddle; Jack Sprat, Rain
April	Momotaro: Peach Boy, The Hokey Pokey, Green Eggs and Ham, Tikki Tikki Tembo, There was an Old Lady		Rain, Rain Go Away; It's Raining, It's Pouring; April Rain Song; Hickory Dickory Dock; A Dillar A Dollar
May	House for a Hermit Crab, A House is a House for Me	The Complete Tales and Poems of Winnie the Pooh	Ladybug Ladybug; Little Miss Muffet; Sing a Song of Sixpence; Star Light Star Bright; Little Bo Peep; Baa Baa Black Sheep

## **Learn by Heart**

Month	Sayings	Recitation
January	Better safe than sorry	"Happy Thought" - Robert Louis Stevenson
February	A place for everything and everything in its place	
March	Where there's a will, there's a way; Practice makes perfect	
April	April showers bring May flowers	"Wind on the Hill" - A.A. Milne
May	Look before you leap	"Tommy" - Gwendolyn Brooks

# <u>Kindergarten Math - Year at a Glance</u>

Textbook: Math in Focus

#### <u>First Semester</u>

Month	Торіс	Text Reference
August	Numbers 1-10	chs. 1-2
September	Order by size, length, and weight Counting and numbers 0-10 Size and Position	chs. 3-5
October	Numbers 0-20 Solid and Flat Shapes	chs. 6-7
November	Numbers 0-100	ch. 8
December	Comparing Sets Ordinal Numerals	chs. 9-10

Month	Торіс	Text Reference
January	Calendar Patterns Counting On and Counting Back Patterns	chs. 11-13
February	Number Facts Length and Height	chs. 14-15
March	Classifying and Sorting Addition Stories	chs. 16-17
April	Subtraction Stories	ch. 18
May	Measurement Money	chs. 19-20

# <u>Kindergarten Science - Year at a Glance</u>

Everything Your Kindergartener Needs to Know (WK)

Month	STEMscopes Topic	Additional Texts
August	Safety & What Scientists Do	
	Your Five Senses	<i>WK</i> p. 362
September	Properties of Objects & Changes from Heat	
October	Energy/ Patterns of Movement	
	<u>Magnets</u>	
	An Invisible Force: Magnetism An Invisible Force: Magnetism	<i>WK</i> pp.379-371 <i>WK</i> p. 372
November	Rocks, Soil, and Water	
December	Keep the Earth Clean	
	Taking Care of the Earth Reduce, Reuse, Recycle	<i>WK</i> pp. 365-369

Month	STEMscopes Topic	Additional Texts
January	Weather (sun, wind, snow, rain, temperature, clouds)	
	The Four Seasons Talking About the Weather, The Wind Blows in Many Directions Rain and Snow, Make a Snowflake, Storms	<i>WK</i> pp. 347-348 <i>WK</i> pp. 349-353 <i>WK</i> pp. 354-358
February	Living and Nonliving	
March	Animals and Basic Needs	
	Animals and Their Needs	WK pp. 359-361 DK Eyewitness: Mammals
	Jane Goodall	<i>WK</i> pp. 378-379 <i>The Watcher</i> - Jeanette Winter
	<u>Plants</u>	
	Plants and Plant Growth Plants and Plant Growth (Class plants seeds)	WK pp. 334-341 WK pp. 341-346 A Weed is a Flower - Aliki From Seed to Plant - Gail Gibbons
	George Washington Carver	<i>WK</i> pp. 375-377
April	<u>Ladybug Unit, Plant Life Cycle, Earth Day</u>	
May	<u>Forest Unit/Habitats</u>	

# <u>Kindergarten Music - Year at a Glance</u>

 ${\bf Music\ Text:}\ {\it Everything\ Your\ Kindergartner\ Needs\ to\ Know}$ 

#### First Semester

Month	Торіс	Texts
August	Moving to Music/ My Country 'Tis of Thee Bingo	p. 248 p. 258
September	Follow the Beat Go In and Out the Window Make Up the Beat	p. 248 p. 258 p. 252
October	Hush, Little Baby Loud and Quiet London Bridge is Falling Down Loud Songs, Quiet Songs Here We Go Round the Mulberry Bush	p. 259 p. 253 p. 260 p. 254 p. 261
November	Loud Drum, Quiet Drum My Bonnie Lies over the Ocean	p. 255 p. 261
December	Fast and Slow, Jingle Bells	p. 265

Month	Торіс	Text Reference
January	Twinkle, Twinkle, Little Star Pop! Goes the Weasel, Go Tell Aunt Rhody	p. 263 p. 264
February	The Bear Went over the Mountain Old MacDonald	p. 265 p. 262
March	High and Low The Farmer in the Dell	p. 257 p. 266
April	The Hokey Pokey, If You're Happy and You Know It Kookaburra	p. 267 p. 268
May	Kum Ba Yah, Row Row Row Your Boat The Wheels on the Bus This Old Man	p. 268 p. 269 p. 270

# <u>First Grade History - Year at a Glance</u>

Everything Your First Grader Needs to Know (W1) Story of the World 1, 2, and 3 (SW1, SW2, SW3)

#### First Semester

Month	Topic	Text
August	HISTORY	
	History: Everyone's Story The Ice Age: Humans on the Move, Learning About the Ice Age	<i>W1</i> p. 163 <i>W1</i> pp. 164-168
	Introduction The Earliest People	SW1 SW1 ch. 1
	GEOGRAPHY	
	How to read a map, compass rose, directions	
	Student Can Label: 7 continents and 5 oceans	
September	HISTORY	
	Mesopotamia - Another Gift What's a Ziggurat, A Leader and the Laws A Great Mesopotamian Story	<i>W1</i> p. 178 <i>W1</i> pp. 180-181 <i>W1</i> p. 179
	The First Sumerian Dictator Hammurabi and the Babylonians The Assyrians	SW1 ch. 5 SW1 ch. 7 SW1 ch. 8
	GEOGRAPHY	
	Student Can Identify: Mesopotamia, Tigris River, Euphrates River, Babylon Commit to Memory: Hammurabi enacts the Code of Hammurabi, 1750 BC	

October	HISTORY	
	Egypt: Gift of the Nile Hieroglyphics: Picture Writing A Journey Down the Nile Fantastic Pharaohs and Marvelous Monuments The Treasures of King Tut  Egyptians Lived on the Nile River The First Writing, The Old Kingdom, The Middle of Egypt The New Kingdom of Egypt	W1 p. 167 W1 p. 171 W1 p. 173 W1 p. 170 W1 p. 177 SW1 ch. 2 SW1 chs. 3-4, 12 SW1 ch. 13
	GEOGRAPHY	
	Students Can Identify: Egypt and the Nile River	
November	HISTORY	
	Religions: What Different People Believe, Judaism Islam	<i>W1</i> pp. 182-183 <i>W1</i> p. 195
	The Phoenicians, The Return of Assyria, Babylon Takes Over Again! The Jewish People The Israelites Leave Egypt, The End of the Ancient Jewish Nation Islam Becomes an Empire	SW1 chs. 15-17 SW1 ch. 6 SW1 chs. 14, 38 SW2 ch. 7
	GEOGRAPHY	
	Students Can Identify: Jerusalem	
December	HISTORY	
	Christianity The Beginning of Christianity Christianity Comes to Britain	<i>W1</i> p. 189 <i>SW1</i> ch. 37 <i>SW2</i> ch. 3

Month	Торіс	<b>Text Reference</b>
January	HISTORY	
	Crossing the Land Bridge, Cities in the Jungle: The	<i>W1</i> pp. 199, 203
	Maya City in the Lake: The Aztec City of Tenochtitlan, Cities in the Clouds, the Inca Empire, Sapa Inca for a Day	<i>W1</i> pp. 205, 208, 210
	The American Kingdoms, Mayans, Aztecs, Incas	<i>SW2</i> ch. 32
	GEOGRAPHY	
	Students Can Identify: Aztec, Mayan, Incan civilizations and Mexico on a modern map Commit to Memory: Hernan Cortes conquered the Aztec Empire, 1519-1521; Spanish conquest of the Inca Empire, 1532-1572	
February	HISTORY	
	The Arrival of Europeans The Spanish Conquerors Why Did the Spanish Win?, Cortez And Then Came England, the Lost Colony A Lasting English Colony: Jamestown Tobacco, Pocahontas, Slavery Comes to the Colonies  Exploring the New World Spain, Portugal, and the New World James, King of Two Countries The Spread of Slavery  GEOGRAPHY	W1 p. 211 W1 p. 214 W1 p. 215 W1 pp. 219-220 W1 p. 221 W1 pp. 223, 227 SW2 p. 31 SW2 ch. 33 SW3 ch. 3 SW3 ch. 7
	Students Can Label: Great Britain, North America, Jamestown Commit to Memory: Sir Walter Raleigh established Roanoke Colony, 1585	
March (before spring	HISTORY  The Pilgrims, The Puritans  Thirteen Colonies	<i>W1</i> pp. 224, 226 <i>W1</i> p. 229
break)	New Colonies in the New World	<i>SW3</i> ch. 6

	GEOGRAPHY	
	Students Can Label: Plymouth Plantation and the Thirteen Colonies	
March & April	HISTORY	
	The Colonists and the King, The Boston Tea Party A Fight with Mother?, The Midnight Ride of Paul Revere George Washington and the War for Independence, George Washington & His Men	W1 pp. 230-231 W1 pp. 232-233 W1 pp. 238, 241
	From Valley Forge to Yorktown, "And Called it Macaroni," A Courageous Woman: Deborah Sampson	<i>W1</i> pp. 241, 244-245
	Benjamin Franklin, Washington as President, Freedom for All?	<i>W1</i> pp. 247, 250, 252
	Fighting Over North America Revolution! The New Country: The American Constitution, The New	SW3 ch. 21 SW3 ch. 22 SW3 ch. 23
	Country: The First American President	577 J CH. 25
	GEOGRAPHY	
	Students Can Label: Lexington, Valley Forge, Yorktown, Philadelphia, Mount Vernon, Washington, D.C.	
	Commit to Memory: Revolutionary War, 1775-1783; Presidency of George Washington, 1789-1797	
May	HISTORY	
	America Grows, What a Bargain! The Louisiana Purchase	<i>W1</i> pp. 252, 254
	The Opened West	<i>SW3</i> ch. 32
	GEOGRAPHY	
	Student Can Label: Louisiana Purchase, Missouri River, Mississippi River, Appalachian Commit to Memory: Louisiana Purchase, 1803	

# <u>First Grade Literature - Year at a Glance</u>

#### <u>First Semester</u>

Children's Book of Virtues (CBV)

Month	Primary Texts	Secondary Texts	Read Aloud
August	Aesop: Sour Grapes, Wolf in Sheep's Clothing, Crow and the Pebble, Lion and the Mouse, Town Mouse City Mouse	CBV: Courage (Fortitude) Grimms' Fairy Tales (pp. 1-50)	Pippi Longstocking
September		CBV: Perseverance (Fortitude)	
		Thumbelina, Issun Boshi, Tom Thumb, Knee-high Man	
		Grimms' Fairy Tales (pp. 56-113)	
October	What is a Princess?: Rapunzel, Princess & the Pea, Rumplestiltskin, Sleeping Beauty, Snow White	the (Prudence) n, Andersen Fairy Tales	
November	<u>Cinderella:</u> Grimms', China, India, Korea, Egyptian, etc.	CBV: Work (Fortitude)	
December	Beatrix Potter, Brer Rabbit	Children's Book of Virtues: Self-Discipline (Temperance)	Trumpet of the Swan

#### **Learn By Heart**

Month	Poetry	Sayings
August	I Know All the Sounds the Animals Make, The Purple Cow	If at first you don't succeed, try and try again
September	Wynken, Blynken, and Nod	Hit the nail on the head
October	The Owl and the Pussy Cat <u>Recitation:</u> "The Pasture" - Robert Frost	Do unto others as you would have them do on to you
November	Thanksgiving Day	Let the cat out of the bag
December	Sing a Song of People	The more the merrier

#### Children's Book of Virtues (CBV)

Month	Primary Texts	Secondary Texts	Read Aloud
January	What is a hero?: Robin Hood stories, King Arthur, etc.	CBV: Compassion (Charity)	Trumpet of the Swan
February	Norse Myths	CBV: Honesty (Justice)	House at Pooh Corner
March	Greek Myths	CBV: Loyalty (Fortitude)	James and the Giant Peach; Pied Piper
April	How Anansi Got Stories	CBV: Friendship  Frog and Toad Collection (Student Classwork/Homework Reading)	Pinocchio
May			

#### Learn by Heart

Month	Poetry	Sayings
January	Норе	Practice makes perfect
February	Pope Rhyme	There's no place like home
March	Recitation: "The Swing" - Robert Louis Stevenson	An apple a day keeps the doctor away
April	Table Manners <u>Recitation:</u> "Washington" - Nancy Byrd Turner	Fish out of water
May	Recitation: "My Shadow" - Robert Louis Stevenson	Never leave till tomorrow what you can do today

# First Grade Math - Year at a Glance

Textbook: Math in Focus

#### Semester 1 (1A)

Month	Торіс	Text Reference
August	Numbers to 10	ch. 1
September	Number Bonds Addition Facts to 10	ch. 2 ch. 3
October	Subtraction Facts to 10 Shapes and Patterns	lesson 4 (ch. 4?) ch. 5
November	Ordinal Numbers and Position Numbers to 20	ch. 6 ch. 7
December	Addition and Subtraction Facts to 20 Length	ch. 8 ch. 9

#### Semester 2 (1B)

Month	Торіс	Text Reference
January	Weight Picture Graphs and Bar Graphs	ch. 10 ch. 11
February	Numbers to 40 Addition and Subtraction to 40	ch. 12 ch. 13
March	Mental Math Strategies Calendar and Time	ch. 14 ch. 15
April	Number to 120 Addition and Subtraction to 100	ch. 16 ch. 17
May	Multiplication and Division Money	ch. 18 ch. 19

# First Grade Science - Year at a Glance

Everything Your First Grader Needs to Know(W1)

Month	STEMscopes Topic	Additional Texts
August	Safety and What Scientists Do	
September	Classifying Matter/Changes from Heat	
	Matter, The World is Made of Matter Changing States of Matter How Long? How Tall? How Much?; How Much? Cups, Quarts, Gallons; How Hot? How Cold? Measuring Temperature	<i>W1</i> pp. 413-415 <i>W1</i> pp. 415-416 <i>W1</i> pp. 419-423
October	Energy/Patterns of Movement	
	Electricity: An Introduction to the Shocking Facts; Static Electricity; Turn it on, Turn it off: Electricity, What Conducts Electricity?	<i>W1</i> pp. 424-428
	Stay Safe Around Electricity, Thomas Edison	<i>W1</i> pp. 429-431
	<u>Magnets</u>	
November	Soil/Resources/Bodies of Water	
	Our Planet Earth, Inside the Earth	W1 pp. 442-445 Inside Out - Gail Gibbons
	Earth and Its Rocks, Earth's Minerals	<i>W1</i> pp. 445-449
December	Bodies of Water/Conservation	
	Water Habitats Oceans and Undersea Life, Ocean Tides Ocean Life, Taking Care of the Ocean	<i>W1</i> pp. 386-388 <i>W1</i> pp. 394-398 <i>W1</i> pp. 398-401

Month	STEMscopes Topic	Additional Texts
January	Weather/Objects in the Sky	
	Astronomy: Our Solar System; Our Sun and Our Solar System; Constellations: Connect-the-Dot Stars	<i>W1</i> pp. 432-434; 439 <i>Sun Up, Sun Down</i> - Gail Gibbons
	A Journey Through the Solar System  Our Big, Round, Moving Planet; The Moon	W1 pp. 435-436 The Planets - Gail Gibbons
		<i>W1</i> pp. 440-441; 537-438
February	Seasons/ Day and Night	
March	Plant Parts/Animal Characteristics	
	Living Things and Their Habitats The Underground Habitat; The Desert Habitat The Forest Habitat; Taking Care of Earth's Habitats; The Endangered Rainforest Habitat	<i>W1</i> pp. 378-379 <i>W1</i> pp. 384-385 <i>W1</i> pp. 380-383
April	<u>Life Cycle</u>	
	The Food Chain	<i>W1</i> pp. 388-389
May	Butterfly Unit/ Interdependency/ Prairie Unit	

# First Grade Music - Year at a Glance

 ${\bf Music\ Text:}\ {\it Everything\ Your\ First\ Grader\ Needs\ to\ Know}$ 

#### Semester 1

Month	Торіс	Texts
August	My Country 'Tis of Thee Melody, Harmony, and Rhythm/ America the Beautiful	p. 292
September	Meet a Great Composer La Cucaracha Mozart the Wonder Boy	p. 294 p. 315 p. 295
October	Blow the Man Down Mozart, a Famous Composer Billy Boy Reading and Writing Music Down by the Riverside	p. 316 p. 298 p. 317 p. 298 p. 318
November	Instruments and Their Families For He's a Jolly Good Fellow	p. 299 p. 319
December	The Percussion Family Down in the Valley The String Family	p. 300 p. 319 p. 301

#### Semester 2

Month	Торіс	Text Reference
January	Dry Bones The Woodwind Family Frere Jacques The Brass Family Michael, Row the Boat Ashore	p. 320 p. 302 p. 321 p. 303 p. 321
February	The Orchestra On Top of Old Smokey Music Can Tell a Story	p. 304 p. 322 p. 306
March	She'll be Comin' 'Round the Mountain Dramas with Music: Opera Skip to My Lou	p. 322 p. 307 p. 323
April	Musical Stories Without Words There's a Hole in the Bucket The Sorcerer's Apprentice Take Me Out to the Ball Game	p. 308 p. 324 p. 308 p. 325
May	Move to the Music A Ballet About a Nutcracker Jazz: America's Musical Gift to the World; Satchmo, a Great Jazz Musician	p. 310 p. 312 p. 313

## **Second Grade History - Year at a Glance**

Everything Your Second Grader Needs to Know (W2) Story of the World 1, 2, and 3 (SW1, SW2, SW3) A History of the United States and Its People (HUS) Core Knowledge (CK)

Month	Topic	Text
August	GEOGRAPHY	
	World History and Geography	<i>W2</i> pp. 133-137
	Student Can Label: 7 continents and 5 oceans	
September	HISTORY	
1	The Indus Valley The Aryans of India, The Mauryan Empire of India Civilization Along the Gages, Hinduism, etc. The Medieval Indian Empire, India Under the Mughals The Mughal Emperors of India	W2 pp. 138-140 SW1 ch. 30-31 W2 pp. 140-149 SW1 chs. 5, 30 SW3 ch. 11
	Important Dates: 563-483 BC: Siddhartha Gautama (the Buddha) lives 1556 AD: Akbar becomes emperor of India 1605 AD: Jahangir (World Sizer) becomes emperor of India	
	GEOGRAPHY	
	Delhi, Bombay, and Calcutta	<i>SW3</i> p. 180
	Student Can Label: Modern India (on map and globe)	
October	HISTORY	
	Confucius China, etc The Great Dynasties China Adrift! Modern Japan etc. Warlords of Japan	SW1 ch. 33 W2 pp. 149-158 SW2 ch. 8 SW3 ch. 39 W2 pp. 158-162 SW3 ch. 5

		1
	Important Dates: 551-479 BC: Confucius lives 2690 BC: Huangdi rules China 590 AD: Yang Chien completes the unification of China GEOGRAPHY	
	<b>Students Can Label:</b> Modern China and Modern Japan <i>(on map and globe)</i> , Great Wall of China, Himalayas, Indus, Ganges, Yangtze, and Yellow Rivers	
November - December	HISTORY  Life in Early Crete, Greece Gets Civilized Again, Sparta and Athens, The Wars of the Greeks Ancient Greek Civilizations etc The Greek Gods, Alexander the Great Alexander the Great etc.	SW1 chs. 18, 20, 22, 24 W2 pp. 163-176 SW1 chs. 23, 25 W2 pp. 176-180
	Important Dates:  1450 BC: Mycenaeans settle in Crete 559-525 BC: Cyrus the Great Rules over Medes and Persians 499 BC: Persian Wars 431-404 BC: Peloponnesian War 336-323 BC: Alexander the Great rules	

Month	Торіс	Text Reference
January	HISTORY	
	Constitution The New Country The Constitution Troubles with England and France, Presidency of John Adams, Election of Jefferson, War with Tripoli, The Settlement of the Great Valley, Second War with England The War of 1812 The Navy in the War of 1812, The Army in the War of 1812  Important Dates:  1789: Creation of the U.S. Constitution 1789-1797: Presidency of George Washington 1801-1809: Presidency of Thomas Jefferson 1803: Louisiana Purchase 1812-1815: War of 1812	CK SW3 ch. 23 W2 pp. 184-188 HUS W2 pp. 189-197; CK HUS
February	HISTORY	
	Settlers Head West The Steamboat, the Railroad, and the Telegraph Boats and Canals, etc., The Oregon Trail, etc.	<i>W2</i> pp. 198-199 <i>HUS</i> <i>W2</i> pp. 200-219
	Important Dates: 1820: Missouri Compromise	
March	HISTORY	
	Civil War, Fort Sumter, 1st Battle of Bull Run, Underground Railroad The Questions of Slavery in Politics; How the Great Civil War Began	CK HUS W2 pp. 220-225
	Fredericksburg, Vicksburg The War of the East-From Bull Run to Gettysburg Gettysburg and Sherman's March Close of the Civil War Songs of the North and South	HUS HUS W2 pp. 226-228
	<u>Important Dates:</u> 1861-1865: Civil War	

	1863: Battle of Gettysburg 1863: Emancipation Proclamation 1870: Fifteenth Amendment gives former slaves the right to vote	
April	HISTORY	
	Immigrations: Push/Pull Factors, Ellis Island, Angel Island Civil Rights: Susan B. Anthony, Brown v. Board of Education, Rosa Parks	CK CK
	Important Dates:  1955: Rosa Parks and Martin Luther King Jr. arrested 1957: Little Rock's Central High School integrated 1968: Martin Luther King Jr. assassinated	
May	GEOGRAPHY	
	Geography of the Americas	<i>W2</i> pp. 249-254

## Second Grade Literature - Year at a Glance

Classical Treasures of Aesop's Fables (AF) Everything Your Second Grader Needs to Know (W2)

Month	Short Stories	<b>Student Texts</b>	Read Aloud
August	W2: "Beauty and the Beast"  "The Tiger, The Brahman, and the Jackal"  "Dust Under the Rug"		
September	AF: "The Crow and the Pitcher" through "The Fox and the Crow"  W2: "The Emperor's New Clothes" "The Magic Paintbrush" "Fisherman and His Wife" "Talk"	Charlotte's Web	
October	AF: "The Tortoise and the Hare" through "The Frog Who Desired a King"  "How Iktomi Lost His Eyes" "The Tongue-Cut Sparrow"		The Horse and His Boy
November	Myths (W2 pg 84-105) Heroes and Monsters, Gods and Goddesses, Gods of Nature and Mythical Creatures, Prometheus Brings Fire, Pandora Brings Woe,	Peter Pan	
December	Oedipus and the Sphinx, Theseus and the Minotaur, Daedalus and Icarus, Arachne the Weaver, Swift-Footed Atalanta, Demeter and Persephone, The Labors of Hercules, Extra: The Choice of Hercules, Hercules and the Wagoner		Christmas Carol

#### **Learn By Heart**

Month	Poetry	Sayings
August	"Something Told the Wild Geese" (W2 p. 14)  "Who Has Seen the Wind" (W2 p. 17)  "Windy Nights" (W2 p. 17)  Recitation:  "Bed in Summer" (W2 p. 7)	Back to the drawing board; Better late than never
September	"Discovery" (W2 p. 9)	Cold feet; Don't cry over spilled milk
October	"Caterpillars" (W2 p. 8) <b>Recitation:</b> "Bee! I'm Expecting You" (W2 p. 8)	Don't judge a book by its cover; Easier said than done
November	"Hurt No Living Thing" (W2 p. 9)	Eaten out of house and home; Get a taste of your own medicine
December	Recitation: "The Night Before Christmas" ( <i>W2</i> p. 12)	Get up on the wrong side of the bed; In hot water

Month	Short Stories	Student Classwork/Homework	Read Aloud
January	W2: "How the Camel Got His Humps" Tall Tales: Pecos Bill, John Henry, and Paul Bunyan	The Courage of Sarah Noble	
February		Little House in the Big Woods	The Iliad
March		The Sign of the Beaver	
April		Cricket in Time Square	
May	W2: "El Pájaro Cu"		

#### **Learn By Heart**

Month	Poetry	Sayings
January	Recitation: Preamble to The Constitution	Keep your fingers crossed; Practice what you preach
February	"Buffalo Dusk" (W2 p. 7) "Smart" (W2 p. 16) "There Was an Old Man with a Beard" (W2 p. 18) "There is a Young Lady, Whose Nose"	Two heads are better than one; Turn over a new leaf
March	"Harriet Tubman" (W2 p. 10) "The Microscope" (W2 p. 426) "Lincoln" (W2 p. 11) "The Blind Men and the Elephant" (W2 p. 20)	Where there's a will, there's a way; You can't teach an old dog new trick
April	"Rudolph is Tired of the City" ( <i>W2</i> p. 15) <b>Recitation:</b> <i>I Have a Dream</i> - Martin Luther King, Jr.	
May		

## Second Grade Math - Year at a Glance

Textbook: Math in Focus

#### <u>First Semester</u>

Month	Торіс	Text Reference
August	Numbers to 1,000	ch. 1
September	`Addition up to 1,000 Subtraction up to 1,000 (extends through 1st part of Oct)	ch. 2 ch. 3
October	Using Bar Models: Addition and Subtraction	ch. 4
November	Multiplication and Division Multiplication Tables of 2, 5, and 10	ch. 5 ch. 6
December	Metric Measurement of Length Mass Volume	ch. 7 ch. 8 ch. 9

Month	Торіс	Text Reference
January	Mental Math and Estimation Money	ch. 10 ch. 11
February	Fractions Customary Measurement of Length	ch. 12 ch. 13
March	Time Multiplication Tables of 3 and 4	ch. 14 ch. 15
April	Using Bar Models: Multiplication and Division Picture Graphs	ch. 16 ch. 17
May	Lines and Surfaces Shapes and Patterns	ch. 18 ch. 19

## Second Grade Science - Year at a Glance

Everything Your Second Grader Needs to Know (W2)

Month	STEMscopes Topic	Additional Texts
August	Scientists and Safety	
	The Human Body Anton van Leeuwenhock	<i>W2</i> pp. 423-426
	Cells and Tissues	<i>W2</i> pp. 427-431
	Daniel Hale Williams, a Brave Doctor	<i>W2</i> pp. 431-432
September	Classifying Matter and Changes from Heat	
October	Physical Changes	
	Forms of Energy	
	Simple Machines, Levers, Wheels, The Force of Friction	<i>W2</i> pp. 462-465
	Pulleys, Inclined Planes	<i>W</i> 2 pp. 467-469
	Wedges, Screws Elijah McCoy, a Great Inventor	<i>W</i> 2 pp. 470-472 <i>W</i> 2 pp. 466-467
November	Patterns of Movement/Magnets	
December	Rocks and Resources	

Month	STEMscopes Topic	Additional Texts
January	Bodies of Water/Weather	
February	Objects in the Sky	
	Basic Needs and Plants	
March	Animal Characteristics	
	<u>Life Cycles</u> Life Cycles	W2 pp. 408-410 Egg - Robert Burton Chicks & Chickens - Gail Gibbons
	Are They Insects? Insect Life Cycle	W2 pp. 442-444 Monarch Butterfly - Gail Gibbons
April	Insects/Spider Unit/Food Chain	
	Insects Everywhere!, Meet a Fly Insect Legs and Body Parts, Meet a Beetle	W2 pp. 438-9 W2 pp. 440-1 Ladybugs - Gail
	The Insect Exoskeleton, Meet a Cockroach Meet a Praying Mantis, A Simpler Kind of Metamorphosis Meet an Ant, An Ant Colony	Gibbons  W2 pp. 441-2  W2 pp. 445-6
	Meet all Alit, All Alit Colony Meet a Honeybee, In a Beehive Meet an Entomologist	W2 pp. 447-8 W2 pp. 449-453 W2 pp. 454-5
May	Environmental Effects/Ocean Unit	

## Second Grade Music - Year at a Glance

 ${\bf Music\ Text:}\ {\it Everything\ Your\ Second\ Grader\ Needs\ to\ Know}$ 

#### <u>First Semester</u>

Month	Topic	Texts
August	My Country 'Tis of Thee Patriotic Music	p. 290
September	Clementine Folk Music	p. 313 p. 292
October	Old Dan Tucker Classical Music	p. 314 p. 293
November	Home on the Range Meet Some Great Composers	p. 314 p. 294
December	Meet Some Great Composers Goodbye, Old Paint	p. 294 p. 315

Month	Торіс	Text Reference
January	The String Family Buffalo Gals	p. 298 p. 315
February	The Percussion Family Casey Jones	p. 300 p. 316
March	Keyboard Instruments Bach at the Keyboard Writing Music Down	p. 303 p. 304 p. 305
April	Follow the Notes Pitch: High and Low	p. 306 p. 308
May	A Musical Scale Do-Re-Mi	p. 310 p. 311

# <u>Third Grade History - Year at a Glance</u>

Everything Your Third Grader Needs to Know (W3) Story of the World 1 and 2 (SW1, SW2)

September  September  The Legend of How Rome Began, Religions, Roman Style, Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Rome's War with Carthage Rome's War with Carthage Rome's War with Carthage Rome's War with Carthage Rome's Rome founded 509 BC: Roman Republic established 264-146 BC: Three Punic Wars  Fivers: Yellow, Yangtze, Ob, Ganges, Indus, Tigris, Euphrates, Cong, Niger, Volga, Danube, Rhine, Darling, Murray, Amazon, Parana, Orinoco  Student Can Identify:  Compass rose, North and South Poles, Northern and Southern hemisphere  HISTORY  The Legend of How Rome Began, Religions, Roman Style, Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Hannibal Keeps His W3 pp. 129 SW1 ch. 28  ### The Legend of How Rome Began, Religions, Roman Empire SW1 ch. 27  ### W3 pp. 129  ### SW1 ch. 29  ### Sw1 ch. 29  ### Sw2 p. 2	Month	Торіс	Text
September  September  HISTORY  The Legend of How Rome Began, Religions, Roman Style, Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Rome's War with Carthage Rome's War with Carthage Rome's War with Carthage Rome's War with Carthage Rome's Rome founded 509 BC: Roman Republic established 264-146 BC: Three Punic Wars  United States, Texas, Canada, Mexico, Central America, the Equator; Romes, Indus, Tigris, Euphrates, Vanges, Indus, Tigris, Euphrates, Nile, Congo, Niger, Volga, Danube, Rhine, Darling, Murray, Amazon, Parana, Orinoco  Student Can Identify:  Conganges, Indus, Tigris, Euphrates, This Equation, Parana, Orinoco  HISTORY  The Legend of How Rome Began, Religions, Roman Style, Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Hannibal Keeps His W3 pp. 129 SW1 ch. 29  Himportant Dates:  753 BC: Rome founded 509 BC: Roman Republic established 264-146 BC: Three Punic Wars  GEOGRAPHY  Student Can Label:	August	gust <b>GEOGRAPHY</b>	
September  HISTORY  The Legend of How Rome Began, Religions, Roman Style, Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Hannibal Keeps His Promise, The Final Defeat of Carthage Rome's War with Carthage Rome's War with Carthage The Roman Empire SW1 ch. 28  Important Dates: 753 BC: Rome founded 509 BC: Roman Republic established 264-146 BC: Three Punic Wars  GEOGRAPHY  Student Can Label:  SW3 pp. 126  SW1 ch. 27  W3 pp. 129  SW1 ch. 28  W3 pp. 132  SW1 ch. 29  SW1 ch. 29		7 continents and 5 oceans United States, Texas, Canada, Mexico, Central America, the Equator; Rivers: Yellow, Yangtze, Ob, Ganges, Indus, Tigris, Euphrates, Nile, Congo, Niger, Volga, Danube, Rhine,	<i>W3</i> pp. 112-124
The Legend of How Rome Began, Religions, Roman Style, Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Hannibal Keeps His Promise, The Final Defeat of Carthage Rome's War with Carthage Rome's War with Carthage SW1 ch. 29  Important Dates: 753 BC: Rome founded 509 BC: Roman Republic established 264-146 BC: Three Punic Wars  GEOGRAPHY  Student Can Label:		compass rose, North and South Poles, Northern and	
Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Hannibal Keeps His Promise, The Final Defeat of Carthage Rome's War with Carthage Rome's War with Carthage SW1 ch. 29  Important Dates: 753 BC: Rome founded 509 BC: Roman Republic established 264-146 BC: Three Punic Wars  GEOGRAPHY  Student Can Label:	September	HISTORY	
Student Can Label: SW2 p. 2		Rome's Powerful Location The Rise of Rome (Rome's Early Republic, Rome and the Provinces The Roman Empire Latin Lives!, Conquering Carthage, Hannibal Keeps His Promise, The Final Defeat of Carthage Rome's War with Carthage  Important Dates: 753 BC: Rome founded 509 BC: Roman Republic established 264-146 BC: Three Punic Wars	W3 pp. 129-131 SW1 ch. 28 W3 pp. 132-136
and Egypt on a map of the Roman Empire		Student Can Label: Britain, Gaul, Spain, Italy, Greece, Asia, Minor, Syria,	<i>SW2</i> p. 2

October	HISTORY	
	All Roads Lead to Rome, Julius Caesar Shows the Pirates Who's Boss The Rise of Julius Caesar Pompey, Caesar's Rival, Crossing the Rubicon, Caesar Meets Cleopatra, Pride Comes Before a Fall Caesar the Hero Octavian Becomes Augustus Caesar, Pax Romana, Downtown in the Roman Empire	W3 pp. 136-137  SW1 ch. 34  W4 pp. 138-141  SW1 ch. 35  W3 pp. 142-145
	Important Dates: 49 BC: Caesar crosses the Rubicon 44 BC: Caesar assassinated 27BC: Augustus establishes the Roman empire	
November	HISTORY The First Roman Prince, The Beginning of Christianity, Rome and the Christians A Long Line of Emperors, Nero: Not a Hero Rome Begins to Weaken Christians During the Days of Ancient Rome, The Beginning of the End The Attacking Barbarians Constantine Sees a Burning Cross, Constantinople: A City Full of Art, The Fall of the Roman Empire The End of Rome The Glory That was Rome The Byzantine Empire The Justinian Code: A Gift from the Byzantine Empire The Kingdom of the Franks  Important Dates: 70 AD: Titus sacks Jerusalem and destroys the temple 79 AD: Mt. Vesuvius buried Pompeii in volcanic ash 293 AD: Diocletian splits the empire 410 and 455 AD: Visigoths and Vandals loot Rome 467 AD:Western Roman Empire falls  GEOGRAPHY  Student Can Label: Rome, Constantinople, Alexander, Black Sea, Mediterranean Sea, Aegean Sea on a map of the Byzantine Empire	SW1 chs. 36-7, 39 W3 pp. 152-154 SW1 ch. 40 W3 pp. 154-156 SW1 ch. 41 W3 pp. 156-159 SW1 ch. 42 SW2 ch. 1 SW2 ch. 4 W3 pp. 160-161 SW2 ch. 11

December	HISTORY	
	Who were the Vikings?/Good Guys or Bad Guys? The Arrival of the Norsemen Men of the Sea, Eric the Red, Leif the Lucky	W3 pp. 162-165 SW2 ch. 4 W3 pp. 166-168
	Important Dates: 768-814 AD: Charlemagne rules the Franks 871-899 AD: Alfred the Great rules Wessex 980: Eric the Red discovered Greenland	
	GEOGRAPHY	
	Student Can Label: England, Scotland, Ireland, Wales, Wessex, Normandy, Hastings, Bayeux	<i>SW2</i> p. 142

Month	Торіс	<b>Text Reference</b>
January	HISTORY	
	Crossing the Land Bridge, The Inuits, The Mound Builders, Cliff Dwellers: The Anasazi, The Pueblo People	<i>W</i> 3 pp. 169-175
	The Apaches and the Navajos, Eastern Woodland Peoples, A Day with Little Thunder	<i>W3</i> pp. 175-181
	Important Dates: 1450: Gutenberg invents the printing press	
February	HISTORY	
	A 'New World' for Europeans A Fountain of Youth?, De Soto's Cruel Quest The First Lasting European Settlement, In Search of the Cities of Gold, Spanish Missions Seeking a Northwest Passage	W3 pp. 183- W3 pp. 183-185 W3 pp. 186-189 W3 pp. 190-194
	Important Dates:  1492: Christopher Columbus' first voyage  1520: Magellan crosses the Pacific  1565: St. Augustine Florida founded  1587: Sir Walter Raleigh re-establishes Roanoke Colony	
March - April	HISTORY  Thirteen Colonies, Jamestown: Dreaming Smith Lays Down the Law, The Powhatan and the English, The Starving Time, A Cash Crop Ladies and the Law, The Arrival of the Africans The Pilgrims at Plymouth, The Mayflower Compact, A' Wild and Savage' Land, The Pilgrims and the Wampanoag Tisquantum Fight, Thanksgiving: Peace and Plenty Massachusetts Bay: The Puritans, People of the Book Roger Williams and Rhode Island, Anne Hutchinson	W3 pp. 195-198 W3 pp. 198-203 W3 pp. 203-204 W3 pp. 205-209 W3 pp. 209-215 W3 pp. 216-217 W3 pp. 217-219
	Important Dates:  1607: Jamestown founded  1612: Settlers first plant tobacco in Virginia  1620: Pilgrims arrive at Cape Cod  1621: Wampanoag leader Massasoit establishes peace with  the Pilgrims  1630: Massachusetts Bay Colony  1636: Roger Williams founded Rhode Island	

May	History One People's Prosperity, Another's Peril, Maryland and Pennsylvania: Refuges for Other Religions A Refuge for Catholics, New Netherland	<i>W</i> 3 pp. 220-222 <i>W</i> 3 pp. 222-224
	Charles' Carolina, A Debtor's Tale The Slave Trade	· ,
	Important Dates: 1632: Lord Calvert founded Maryland 1626: The Dutch boy Manhattan Island from the Indies 1663: Carolina chartered 1664: English conquered New Amsterdam, name it New York	
	GEOGRAPHY	
	Student Can Label: 13 colonies	

## Third Grade Literature - Year at a Glance

Well Ordered Language 1A & 1B (WOL) Everything Your Third Grader Needs to Know (W3)

Month	Short Stories	<b>Grammar</b> <i>WOL 1A</i>	Student Work	Read Aloud
August		Four Kinds of Sentences (ch. 1)	One Thousand and One Arabian Nights (runs into part of Sept.)	
September		Principle Elements: Subject and Predicate/Subject and Predicate Verb (chs. 2-3)	Black Beauty	Prince Caspian (through end of 1st quarter)
October	Roman Myths	Adverbs (ch. 4)		
November		Adjectives/Direct Objects (chs. 5-6)	The Princess and the Goblin	Detectives in Togas
December	Norse Mythology	Pronouns/Interrogat ive Sentences (chs. 7-8)		

Month	Poetry	Sayings W3
August	Recitation "By Myself" - Eloise Greenfield	Actions speak louder than words (p. 59)
September	"The Bee" "The Crocodile" "Eletelophony"	Beat around the bush Last straw (pp. 59, 61)
October	"The Adventures of Isabel"  Recitation  "The Duel" - Eugene Field	When in Rome do as the Romans do Rome wasn't built in a day (p. 62) Cold Shoulder (p. 60)
November	Recitation  "First Thanksgiving of All"  - Nancy Byrd Turner	A feather in your cap (p. 60)
December	"Catch a Little Rhyme"	Let bygones be bygones (p. 61)

Month	Short Stories	<b>Grammar</b> <i>WOL 1B</i>	Student Work	Read Aloud
January	The Hunting of the Great Bear	Object Pronouns (ch. 1)		
February	W3: Three Words of Wisdom	Pronoun Review/Prepositional Phrases-Adverbial (chs. 2-3)	Farmer Boy	Swiss Family Robinson
March	W3: William Tell, The People Who Could Fly, The Husband Who was to Mind the Horse	Introductory Prepositional Phrases (ch. 4) Compound Subjects (ch. 5)		
April	The Little Match Girl	Compound Verbs (ch. 6)	The Jungle Book	
May		Compound Direct Objects (ch. 7)		Heidi

Month	Poetry	Sayings W3
January	"Knoxville, Tennessee"	One rotten apple spoils the whole barrel (p. 61)
February		Rule the roost Touch and go (p. 62)
March	"Father William" <u><b>Recitation</b></u> "Trees" - Sergeant Joyce Kilmer	Beggars can't be choosers Clean bill of health (pp. 59-60)
April	"For Want of a Nail, the Shoe was Lost" Recitation  "The Flag Goes By" - Henry H. Bennett	His bark is worse than his bite (p. 59)
May		The show must go on On its last legs (p. 62)

## Third Grade Math - Year at a Glance

Textbook: Math in Focus

## Semester 1 (3A)

Month	Торіс	Text Reference
August	Numbers to 10,000 Mental Math and Estimation	ch. 1 ch. 2
September	Addition up to 10,000 Subtraction up to 10,000	ch. 3 ch. 4
October	Using Bar Models: Addition and Subtraction Multiplication Tables of 6, 7, 8, 9	ch. 5 ch. 6
November	Multiplication Division	ch. 7 ch.8
December	Using Bar Models: Multiplication and Division	ch. 9

## Semester 2 (3B)

Month	Торіс	Text Reference
January	Money Metric Length, Mass, and Volume	ch. 10 ch. 11
February	Real-World Problems: Measurement Bar Graphs and Line Plots	ch. 12 ch. 13
March	Fractions Customary Length, Weight, and Capacity	ch. 14 ch. 15
April	Time and Temperature Angles and Lines	ch. 16 ch. 17
May	Two-Dimensional Shapes Area and Perimeter	ch. 18 ch. 19

# **Third Grade Science - Year at a Glance**

Everything Your Third Grader Needs to Know (W3)

### Semester 1

Month	STEMscopes Topic	W3 Reference
August	<u>Safety</u> <u>Taking Measurements</u>	
September	Force and Motion	
October	Classifying Matter/Energy Light and Vision  The Human Body The Skull, The Spinal Column, The Ribs, The Scapula, The Pelvis, Will you Sign my cast? Many Muscles/ Voluntary and Involuntary Muscles, Connecting Muscles, and Bones The Human Body: The Brain and Nervous System//Alexander Bell Sound and Hearing and the Ear Works Alexander Graham Bell	pp. 406-414  pp. 393-395 395-398  pp. 399-401  pp. 402-405  pp. 415-420  pp. 420-422
November	<u>Natural Resources/Soil</u> John Muir	pp. 464-466
December	<u>Weather</u>	

#### Semester 2

Month	STEMscopes Topic	W3 Reference
January	<u>Solar Systems</u>	
	Astronomy, Our Solar System, Constellations, The Space Shuttle	pp. 423-450
	Nicolaus Copernicus, Women on the Final Frontier	pp. 450-454
February	<u>Ecosystems</u>	
	Ecology, Living Things Depend on One Another Pollution, Conservation, and Recycling	pp. 455-460 pp. 460-464
March	<u>Animal Adaptations</u>	
	Classifying Animals Vertebrates and Invertebrates Life Cycle	pp. 386-387 pp. 387-388
April	Plants: Adaptations and Life Cycle	
May	Frog and Rainforest Units	

# **Third Grade Music - Year at a Glance**

Music Text: Everything Your Third Grader Needs to Know

## <u>First Semester</u>

Month	Торіс	Texts
August	My Country Tis of Thee Reading and Writing Musical Notes Alouette	p. 264 p. 284
September	nber Reading and Writing Rhythm p Hey-Ho, Nobody Home p Keeping Time p	
October	Lil' Liza Jane Rests Down in the Valley Loud and Soft Polly Wolly Doodle	p. 285 p. 269 p. 286 p. 270 p. 287
November	Let's Join the Orchestra Simple Gifts	p. 270 p. 287
December	Percussion and Strings This Little Light The Brass Family	p. 271 p. 288 p. 273

Month	Торіс	Texts
January	He's Got the Whole World in His Hands The Woodwind Family My Bonnie All Together Now The Sidewalks of New York	p. 288 p. 275 p. 289 p. 277 p. 290
February	Musical Connections The Man on the Flying Trapeze Tchaikovsky: Music That Brings Strong Feeling In the Good Old Summer Time	p. 277 p. 290 p. 278 p. 291
March	The Story of Swan Lake Bicycle Built for Two	p. 279 p. 291
April	John Philip Sousa: The March King You're a Grand Old Flag	p. 281 p. 292
May	Aaron Copland: Making American Music America	p. 283 p. 292

## Fourth Grade History - Year at a Glance

Everything Your Fourth Grader Needs to Know (W4) History and Geography Reader (HG4) Texas History Stories by E.G. Littlejohn

Month	Торіс	Text
August	HISTORY Using Maps (measuring distance on a map, latitude and longitude, finding a place on a map, time zones, how to read physical maps)  Mountains (mountain animals, mountains as barriers, making the most of mountains)  GEOGRAPHY  Maps, Hemispheres, Coordinates, Map Scale What a Relief! Mountains of the World American Mountains, Why a Tall Mountain is a Young Mountain, The High Peaks of the Himalayas, African Mountains, The Alps  Student Can Label: The Rockies, Appalachians, Andes, Atlas Mountains, Eastern Highlands, Alps, Ural Mountains, Himalayas, Mt. McKinley, Mt. Aconcagua, Mt. Kilimanjaro, Mt. Blanc, Mt. Everest, Mt. Fuji	<i>W4</i> pp. 70-79
September - October (to end of 1st quarter)	HISTORY <u>Europe in the Middle Ages:</u> Things Fall Apart, The Not-So-Dark-Ages, Two Churches, Prayer and Work, Charlemagne, A Feudal Society, Lords and Castles, Life in a Castle, The Life of a Knight, Chivalry, Medieval Towns, Learning your Trade, Charters and Churches, To the Manor Born, Days of a Knight, A Serf and his Turf	HG4
	Europe in the Middle Ages: City Life, Women in the Middle Ages, William the Conqueror, Henry II, Thomas Becket  England, William the Conqueror, Henry II, Murder in the Cathedral	<i>HG4 W4</i> pp. 88-91

	Europe in the Middle Ages: Eleanor of Aquitaine, The Magna Carta, A New Kind of Government From the Magna Carta to Parliament	<i>HG4</i> <i>W4</i> p. 91
	Europe in the Middle Ages: The Hundred Years' War, Joan of Arc, The Black Death The Black Death, The Hundred Years' War, The End of the Middle Ages	HG4 W4 pp. 92-93
	Important Dates: 476 AD: Western Roman Empire Falls 800: Charlemagne is crowned emperor 1066: Normans defeat English in Battle of Hastings	
October	HISTORY  The Spread of Islam: The Pillars of Islam, Muhammad, The Spread of Islam, Islamic Culture The Rise of Islam: The Prophet, Muhammad, Trouble in Mecca, Muhammad's Return, The Qur'an, The Five Pillars, Spreading the Word of Islam  The Spread of Islam: The Crusades  The Crusades	<i>HG4 W4</i> pp. 94-99 <i>HG4 W4</i> pp. 99-100
November	HISTORY	
	African Kingdoms: The Kingdoms of Kush and Aksum, Trans-Saharan Trade, Ghana, Land Of Gold, Mali, Sundiata Keita African Kingdoms African Kingdoms: Mansa Musa and His Pilgrimage, Songhai and Askia Muhammad, The Travels of Ibn Battuta	<i>HG4 W4</i> pp.  101-108 <i>HG4</i>
December	HISTORY	
	<u>Dynasties of China:</u> The First Emperor, The Han Dynasty, Wu Zhao	HG4
	Dynasties and Conquerors <u>Dynasties of China:</u> The Tang Dynasty, The Peddler's Curse, Town and Country, The Mongol Invasions, Khubilai Khan, The Forbidden City, The Last Dynasty	<i>W4</i> pp. 109-114 <i>HG4</i>

Month	Торіс	Text Reference
January	HISTORY	
	<u>The American Revolution</u> : Meet the Colonists, If You Had Lived in the Colonies	HG4
	Our Country in 1750, The French and Indian War	<i>W4</i> p. 115
	The American Revolution: The Rights of Englishmen, Learning Hard Lessons, THe French and Indian War, The Quarrel with Britain Begins, The Stamp Act Crisis, Parliament Stumbles Again, A Change in Thinking, A Tea Party in Boston	HG4
	Taxation without Representation, A Massacre and a Tea Party in Boston, The First Continental Congress, The War of Words, The Redcoats are Coming!, Lexington and Concord	<i>W4</i> pp. 115-119
Feb	HISTORY	
March (to end of 3rd quarter)	<u>The American Revolution:</u> The Colonies Resist, The Fighting Begins, Preparing for War, The Great Declaration, A Discouraging Start	HG4
	Bunker Hill, The Second Continental Congress, Who Had the Advantage?, Breaking Ties: The Declaration of Independence, The Words of the Declaration	<i>W4</i> p. 119-123
	<u>The American Revolution:</u> Raising America's Spirits, Saratoga Valley Forge, Fighting Shifts to the South'	HG4
	The Times that Try Men's Souls, Saratoga, The French Enter the War, More European Friends, Women in the Revolution, Heroes and Villains, Valley Forge	<i>W4</i> pp. 124-128
	<u>The American Revolution:</u> Fighting Shifts to the South, The World Turned Upside Down	HG4
	<u>Important Dates:</u> July 4, 1776: Approval of the Declaration of Independence	
March	HISTORY	
	The United States Constitution: The Idea of Self-Rule, New	HG4
	Constitutions for the States War's End, Starting Over, Articles of Confederation, Shay's Rebellion	<i>W4</i> pp. 128-130

	The United States Constitution: The Articles of the Confederation, Planning a New Constitution, Waiting in Philadelphia, Some Major Decisions, Checks and Balances	HG4
	Drafting the Constitution, James Madison: Father of the Constitution, Debates and Compromises: The Constitutional Convention of 1787	<i>W4</i> pp. 130-132
	<u>The United States Constitution:</u> Compromises, The Convention Completes Its Work, The States Ratify, Our Constitution Today	HG4
	Slavery and the Three-Fifths Compromise, What Does the Constitution Say or Do?, Checks and Balances, The Bill of Rights, National, State and Local Governments	<i>W4</i> pp. 132-136
April	HISTORY	
	<u>Early Presidents:</u> Washington Became President, The First Year Our First President, The Beginning of Political Parties, A New Capital City	<i>HG4</i> <i>W4</i> pp. 137-139
	Early Presidents: Hamilton and Jefferson, The First Adams, A New Capital for the New Nation, The Many Sided Jefferson Our Second President, Best of Friends, Worst of Enemies, Our Third President, Mr. esserson's Big Purchase, Lewis and Clark	<i>HG4 W4</i> pp. 139-142
	<u>Early Presidents:</u> The Many Sided-Jefferson, Mr. Madison's War	HG4
	Our Fourth President, The War of 1812, Our Fifth President, The Problem of Slavery, The Monroe Doctrine	<i>W4</i> pp. 142-145
	Early Presidents: The Second Adames, Jackson and the Common	HG4
	Man Our Sixth President, Our Seventh President	<i>W4</i> p. 145
May	HISTORY	
	Early Texas History; First Texans Independence Statehood Civil War Reconstruction Post-Reconstruction Early 20th Century	Texas History Stories
	<b>GEOGRAPHY</b> Texas: Regions, Climate	

## Fourth Grade Literature - Year at a Glance

Well Ordered Language 2A and 2B (WOL) Everything Your Fourth Grader Needs to Know (W4)

Month	Student Work	<b>Grammar</b> WOL 2A	Read Aloud
August	Mother Holly Shoemaker and the Elves	Four Kinds of Sentences & Principal Elements (WOL ch. 1) Parts of Speech, Complete Sentences, Kinds of Sentences (W4 pp. 48-51)	
September	Robin Hood	Adverbs, Adjectives (WOL chs. 2-3) Subject-Verb Agreement (W4 p. 50)	
October	Tales of King Arthur	Predicate, Verbs, and Direct Objects (WOL ch. 4) Synonyms and Antonyms (W4 p. 53) Predicate Nominatives (WOL chs. 5) Homophones, Prefixes, Suffixes (W4 pp. 54-55)	
November		Predicate Adjectives, Predicate Review (WOL chs. 6-7) Run-On Sentences, Subject-Verb Agreement (W4 p. 50)	
December	Witch of Blackbird Pond	Possessive Nouns (WOL ch. 8) Commas, Apostrophes (W4 pp. 51-52)	

Month	Poetry	Sayings
August	"Monday's Child is Fair of Face" (W4 p. 5) "Dreams" (W4 p. 7)	As the crow flies Etc. Money burning a hole in your pocket
September		Beauty if only skin deep Got to pot An ounce of prevention is worth a pound of cure
October	"Clarence" ( <i>W4</i> p. 11)	The bigger they are, the harder they fall Half a loaf is better than none
November	"The Rhinoceros" (W4 p. 8)	Birds of a feather flock together Haste makes waste Once in a blue moon
December	Recitation: "Afternoon on a Hill" ( <i>W4</i> p. 8)	Blow hot and cold Break the ice

Month	Student Work	<b>Grammar</b> <i>WOL 2B</i>	Read Aloud
January		Prepositional Phrases, Compound Elements (WOL chs. 1-2)	
February - March (to end of 3rd quarter)	Johnny Tremain	Subject Pronouns, Object Pronouns (WOL chs. 3-4) Quotation Marks (W4 p. 53)	Treasure Island
March		Possessive Pronouns (WOL ch. 5)	
April	Ann of Green Gables	Interrogative Pronouns, Compound Sentences (WOL chs. 6-7)	Paul Revere
May	The Legend of Sleepy Hollow	Relative Pronouns and Relative Clauses (WOL ch. 8)	

Month	Poetry	Sayings
January	"Fog, Clouds" ( <i>W4</i> p. 6)	Bull in a China shop Laugh and the world laughs with you
February	Recitation: "Concord Hymn" ( <i>W4</i> p. 16)	Bury the hatchet Lightning never strikes twice in the same place
March	Recitation: "Paul Revere's Ride" (W4 p. 12-15)	Can't hold a candle to Live and let live
April	Recitation: "George Washington" ( <i>W4</i> p. 17-18)	Don't count your chickens before they hatch Make ends meet
May	"The Pobble Who Has No Toes, A Tragic Story" ( <i>W4</i> p. 9-10)	Don't pull all your eggs in one basket Make hay while the sun shines

## Fourth Grade Math - Year at a Glance

Textbook: *Math in Focus* 

## Semester 1 (4A)

Month	Торіс	Text Reference
August	Place Value of Whole Numbers	ch. 1
September	Estimation and Number Theory	ch. 2
October	Whole Number Multiplication and Division Tables and Line Graphs	ch. 3 ch. 4
November	Data and Probability	ch. 5
December	Fractions and Mixed Numbers	ch. 6

## Semester 2 (4B)

Month	Торіс	Text Reference
January	Decimals	ch. 7
February	Adding and Subtracting Decimals	ch. 8
March	Angles Perpendicular and Parallel Line Segments	ch. 9 ch. 10
April	Squares and Rectangles Area and Perimeter	ch. 11 ch. 12
May	Symmetry Tessellations	ch. 13 ch. 14

## Fourth Grade Science - Year at a Glance

Everything Your Fourth Grader Needs to Know (W4)

Month	STEMscopes Topic	W4 Reference
August	Safety, Taking Measurements Chemistry The Human Body Charles Drew	pp. 258-264 pp. 252-257 pp. 289-290
September	Force and Motion  Classifying Matter	
October	Forms of Energy <u>Circuits</u> Electricity  Michael Faraday	pp. 265-268 pp. 290-292
November	Natural Resources and Soil Geology Making Rocks From Boulder to Rock to Pebble to Soil, Erosion Layer Upon Layer DCSI: Soils	pp. 269-275 pp. 276-277 pp. 277-279 pp. 279-280
December	<u>Water Cycle</u>	

Month	STEMscopes Topic	W4 Reference
Jan Feb	<u>Weather</u>	
	Sun, Moon, Earthy Cycles	
	Meteorology	pp. 280-287
March	<u>Animals</u>	
	<u>Plants</u>	
April	<u>Ecosystems</u>	
May	Bats and Desert Units	

## Fourth Grade Music - Year at a Glance

 ${\bf Music\ Text:}\ {\it Everything\ Your\ Fourth\ Grader\ Needs\ to\ Know}$ 

### First Semester

Month	Topic	Texts
August	My Country 'Tis of Thee Make a Note of It The Orchestra	p. 170 p. 175
September	Auld Lang Syne Shorter and Longer Notes A Magical Musical Tour	p. 182 p. 170 p. 176
October	Cockles and Mussels Give it a Rest The Instrument We All Can Play Comin' Thro the Rye Measures and Time Signatures	p. 183 p. 171 p. 177 p. 184 p. 172
November	Voices, High, and Low Loch Lomond The Treble Clef	p. 178 p. 184 p. 172
December	Music of the Middle Ages	p. 178

Month	Topic	Texts
January	The Yellow Rose of Texas	p. 187
February	My Grandfather's Clock The Composer's Language George Frideric Handel	p. 185 p. 173 p. 179
March	Waltzing Matilda Sharps and Flats Franz Joseph Haydn	p. 186 p. 174 p. 179
April	Wolfgang Amadeus Mozart	p. 180
May	The Army Goes Rolling Along The Marine's Hymn Air Force Song	p. 188 p. 188 p. 188

## Fifth Grade History - Year at a Glance

#### <u>First Semester</u>

#### **Teacher Resources:**

Core Knowledge - World Lakes; Maya, Aztec, and Inca Civilizations; The Age of Exploration; From the Renaissance to England's Golden Age
Student Reader, Timeline Cards

Student Resources: Core Knowledge Workbook (CK)

August	
(may stretch into Sept.)	GEOGRAPHY  Basic Geography & Maps  Reading Maps: Longitude, Latitude, Coordinates, Degrees  Tropic of Cancer, Tropic of Capricorn  Climate Zones  Time Zones  Arctic & Antarctic Circles
	Student Can Label: <u>Lakes</u> : Chad, Victoria, Tanganyika, Titicaca, Maracaibo, Superior, Michigan, Erie, Ontario, Aral Sea, Caspian Sea
September - October (to end of 1st quarter)	HISTORY  Mayas  Locations, Accomplishments, Architecture, Hieroglyphics, Astronomy, Mathematics  Aztecs  Warrior Culture, Tenochtitlan, Moctezuma, Priests  Incas  Empire, Machu Picchu, Cuzco Spanish Conquerors Cortez & Pizarro, Spanish Weaponry  Narrative Review of 1st Quarter  GEOGRAPHY
	<b>Student Can Label:</b> Central & South America, Amazon River, Andes Mountains

October - November	HISTORY	
November	European Exploration, Trade, Colonization, and Slavery	
	Spice Trade, European Motivations, Archipelago, Portugal	
	Sugar Trade, Transatlantic Slave Trade	
	GEOGRAPHY	
	Student Can Label: Portugal, Spain, England, France, Holland	
	HISTORY	
	I. <u>The Renaissance</u>	
	Islamic Scholars, Rebirth of Ancient Philosophy and Ideas, Trade and Wealth, Italian City-States	
	II. <u>The Renaissance</u>	
	The Medici Family and Florence, Popes in Rome, Artists, Castiglione and Machiavelli	
	I. <u>The Reformation</u>	
	Printing Press, Luther, Calvin	
	II. <u>The Reformation</u> Counter-Reformation, Conflict between Church and Science	
	GEOGRAPHY	
	Student Can Label: Modern Germany, Denmark, Sweden, Poland, Italy, London, Wittenberg, Cracow, Trent, Rome	
December	HISTORY	
	England and the Golden Age	
	Henry VIII, Elizabeth I, Naval Dominance From the English Revolution to the Glorious Revolution	
	Charles I, Civil War, Oliver Cromwell, Restoration	
	King James, William and Mary, Bill of Rights	
	Student Can Label:, Ireland, Wales, Scotland, Jamestown	

#### **Teacher Resources:**

Core Knowledge - Czars and Shoguns; Early Russia and Feudal Japan; The Geography of the United States; Westward Expansion Before the Civil War; Native Americans and Westward Expansion: Cultures and Conflicts; The Civil War

Student Resources: Core Knowledge Workbook (CK)

Month	Topic	
January	HISTORY  Russia: Early Growth and Expansion  Successor to the Byzantine Empire, Moscow, Ivan III, Ivan IV(the Terrible),  Peter the Great, Catherine the Great  GEOGRAPHY	
	Student Can Label: Moscow, St. Petersburg, Ural Mountains, Siberia, Steppes Volga and Don Rivers Black, Caspian, and Baltic Seas	
	HISTORY  History & Culture of Feudal Japan  Emperor, Samurai (Code of Bushido), Class System, Buddhism and Shintoism  GEOGRAPHY	
	Student Can Label: Pacific Ocean, Sea of Japan, Main Islands, Tokyo, Pacific Rim	
February	HISTORY <u>US History - Westward Expansion Before the Civil War</u>	
	Early Exploration: Daniel Boone, Cumberland Gap, Wilderness Trail, Lewis and Clark, Sacagawea, Zebulon Pike, Pike's Peak  Native American Resistance: Wagon Trains, Steamboats and Flatboats, Land Routes, Mormons, Tecumseh, Battle of Tippecanoe, Osceola  Manifest Destiny/Mexian-American War: Early Settlement, Stephen Austin, Santa Anna, Battle of the Alamo, General Zachary Taylor, American Opposition, Mexican Cession of Lands	
	GEOGRAPHY	
	Student Can Label: Erie Canal, Appalachian and Rocky Mountains, Continental Divide, Great Plains Rivers: James, Hudson, Lawrence, Mississippi, Missouri, Ohio, Dolumbia, Rio Grande	

March	I. <u>Westward Expansion After the Civil War</u> Homestead Act (1862), Horace Greeley, Railroads and Transcontinental Railroad, Wild West and Its Characters
	II. <u>Westward Expansion After the Civil War</u> Buffalo Soldiers, Alaskan Purchase, 1890 Closing of the American Frontier
	I. <u>Toward the Civil War</u> Abolitionists (William Lloyd Garrison, Frederick Douglass), Slave Life and Rebellions, Industry/Agriculture, Slave Territories and Missouri Compromise, Dred Scott
	GEOGRAPHY (students will master throughout 4th quarter)
	Student Can Label: Western Hemisphere, North America, Caribbean Sea, Gulf of Mexico Regions in US: New England, Mid-Atlantic, South, Midwest, Great Plains, West, Pacific Northwest 50 States and Capitals
April	HISTORY  II. Toward the Civil War  Harriet Beecher Stowe, John Brown, Abraham Lincoln, Lincoln-Douglas Debates I. The Civil War  Ft. Sumter, Union and Confederacy, Bull Run, Robert E. Lee, Ulysses S. Grant, Stonewall Jackson, Ironclad Ships II. The Civil War  Antietam Creek, Emancipation Proclamation, Battle of Gettysburg/Gettysburg Address, Massachusetts Regiment, Sherman, Richmond, Appomattox Surrender, Lincoln Assassination Reconstruction  Political and Economic Struggle in the South, Carpetbaggers and Scalawags, Freedmen's Bureau, 13th-15th Constitutional Amendments, Black Codes and Ku Klux Klan, Compromise of 1877
May	I. Native Americans: Cultures and Conflicts Great Basin, Plateau, Plains, Pacific Northwest, Bureau of Indian Affairs, Removal to Reservations, Assimilation Policies, Carlisle School II. Native Americans: Cultures and Conflicts Sand Creek Massacre, Little Big Horn (Crazy Horse, Sitting Bull, Custer's Last Stand), Wounded Knee

# Fifth Grade Literature - Year at a Glance

Well Ordered Language 3A and 3B (WOL)

Month	Student Texts	<b>Grammar</b> <i>WOL 3A</i>	Read Aloud
August	The Secret Garden	Four Kinds of Sentences, Principal Elements, Adjectives and Adverbs (WOL ch. 1)	
September		Predicate Verbs, Predicate Nominatives and Adjectives, Prepositional Phrases (WOL chs. 2-3)	The Phantom Tollbooth
October	Alice in Wonderland	Personal Pronouns (WOL ch. 4) Sensory Linking Verbs (W4 p. 53)	
November	Wind in the Willows	Indirect Objects, Interrogative Pronouns (WOL chs. 6-7)	I, Juan de Pareja
December		Relative (adjectival) Clauses (WOL ch. 8)	

Month	Poetry	Sayings
August	Recitation: "Opposites" - Richard Wilbur (teacher's choice)	Count your blessings Eureka Vice versa
September	"A Poison Tree" - William Blake <b>Recitation:</b> "The Road Not Taken" - Robert Frost	Far and few between It's never too late to mend A watched pot never boils
October	"Jabberwocky" - Lewis Carroll  Recitations:  "The Eagle" - Alfred, Lord Tennyson  "The Arrow and the Song" - Henry  Wadsworth Longfellow	To kill two birds with one stone Out of the frying pan and into the fire Forty winks Tom, Dick, and Harry
November	"The Snowstorm" - Ralph Waldo Emerson	Bite the hand that feeds you The grass is always greener on the other side
December	"The Wise Old Owl" - Edward Hersey Richards	Time heals all wounds What will be will be

Month	Student Texts	<b>Grammar</b> WOL 3B	Read Aloud
January	Comedy of Errors  "Tale of the Oki Island"	Adverbial Elements: Adverbs, Interrogative Adverbs, Adverbial Prepositional Phrases, Adverbial Noun Phrases, Adverbial Clauses (WOL chs. 1-2)	
February - March (to end of 3rd quarter)	Adventures of Tom Sawyer	Reflexive Pronouns, Verbals - Participles (WOL chs. 3-4)	Caddie Woodlawn
March	Carry On, Mr. Bowditch	Verbals - Gerundives (WOL ch. 5)	
April		Verbals - Infinitives Verbals Review (WOL chs. 6-7)	Frederick Douglass
May	Sherlock Holmes Native American Stories	Types of Sentence: Simple, Compound, Complex, Compound-Complex (WOL ch. 8)	

Month	Poetry	Sayings
January	Recitation: "A Bird Came Down the Walk" - Emily Dickinson	Chip on your shoulder Take the bull by the horns
February	Recitation: "The Tyger" - William Blake	Eleventh hour Lock, stock, and barrel Well begun is half done
March	"I Hear American Singing" - Walt Whitman <u>Recitation:</u> "O Captain! My Captain!" - Walt Whitman	Make a mountain out of a molehill Steal his/her thunder A miss is as good as a mile Sit on the fence
April	"I, Too" - Langston Hughes <b>Recitation:</b> "Barbara Frietchie" - John Greenleaf Whittier	Every cloud has a silver lining Read between the lines
May	"Narcissa" - Gwendolyn Brooks <u>Recitation:</u> "Casey at the Bat" - Ernest Lawrence Thayer	Birthday suit A penny saved is a penny earned

## Fifth Grade Math - Year at a Glance

Textbook: *Math in Focus* 

## Semester 1 (5A)

Month	Торіс	Text Reference
August	Whole Numbers	ch. 1
September	Whole Number Multiplication and Division	ch. 2
October	Fractions and Mixed Numbers Multiplying and Dividing Fractions and Mixed Numbers	ch. 3 ch. 4
November	Algebra	ch. 5
December	Area of a Triangle Ratio	ch. 6 ch. 7

## Semester 2 (5B)

Month	Торіс	Text Reference
January	Decimals Multiplying and Dividing Decimals	ch. 8 ch. 9
February	Percent Graphs and Probability	ch. 10 ch. 11
March	Angles Properties of Triangles and Four-Sided Figures	ch. 12 ch. 13
April	Three-Dimensional Shapes	ch. 14
May	Surface Area and Volume	ch. 15

## Fifth Grade Science - Year at a Glance

STEMscopes Everything Your Fifth Grader Needs to Know (W5)

### <u>First Semester</u>

Month	STEMscopes Topic	W5 Reference
August	Safety, Taking Measurements	
	Force and Motions	
September	<u>Classifying Matter</u>	
October	<u>Energy</u>	
	<u>Electricity</u>	
November	<u>Landforms and Earth's Resources</u>	
December	<u>Water Cycle</u>	

Month	STEMscopes Topic	W5 Reference
January	<u>Weather</u>	
	<u>Sun, Moon, Earth Systems</u>	
February	<u>Ecosystems</u> Classifying Living Things Carl Linnaeus	pp. 300-310 pp. 334-335
March	Adaptations of Plants Ernest Just	pp. 335-336
	Adaptations of Animals Life Cycles and Reproduction, The Human Body Percy Lavon Julian	pp. 314-332 pp. 336-337
April	Science Review of 3rd-5th Grades for STAAR	
May	STAAR Test	
	Classifying Matter project	

## Fifth Grade Music - Year at a Glance

 ${\bf Music\ Text:}\ {\it Everything\ Your\ Fifth\ Grader\ Needs\ to\ Know}$ 

Month	Торіс	Texts
August	My Country 'Tis of Thee What All Music Has in Common High Notes and Low Notes	p. 196 p. 196
September	Sorrow Songs High Notes and Low Notes Sometimes I Feel Like a Motherless Child	p. 210 p. 197 p. 211
October	Dotted and Tied Notes Down by the Riverside Time for a Rest Wayfaring Stranger Measures and Bar Lines	p. 198 p. 211 p. 198 p. 212 p. 198
November	We Shall Overcome Could You Repeat That? Sweet Betsy from Pike	p. 212 p. 199 p. 213
December	Time Signatures Shenandoah	p. 199 p. 214

Month	Торіс	Texts
January	The Treble Clef Git Along, Little Dogies From Sheet Music to Sound God Bless America Sharps and Flats	p. 200 p. 214 p. 201 p. 215 p. 202
February	If I Had a Hammer Italian for Composers Danny Boy You Gotta Have Rhythm	p. 215 p. 202 p. 216 p. 203
March	Red River Valley Verse and Refrain Harmony Polyphonic Music Canons and Rounds	p. 216 p. 204 p. 204 p. 205 p. 205
April	Renaissance Composers Lute Music John Downland	p. 205 p. 206 p. 207
May	Mendelssohn's Midsummer's Night Beethoven: A Stormy Life Set to Music Mussorgsky: Painting Pictures with Music	p. 207 p. 208 p. 209

### **6th Grade Latin - Year at a Glance**

Primary Text: Cambridge Latin Course Unit I Secondary Text: Usborne Book of the Romans

Unit	Grammar Topic	Cultural Topic	Text References
1 (4-5 weeks)  this unit covers stages 1 and 2 of CLC	Students learn to conjugate regular verbs in the present tense & memorize the irregular present tense conjugation of esse  Important Terminology/Concepts:  • inflection • principal parts • present active infinitive • person and number • conjugation rules & present tense endings	Structure of Roman houses  Roman citizens - family, daily life, responsibilities	CLC pp. 2-26 UBR pp. 10 (patronus/cliens relationship); pp. 44-45 (detailed diagram of Roman villas); p. 52 (jobs & occupations, the role of women)
2 (3 weeks)	Students are introduced to the five main noun jobs and case names in Latin.  English grammar is discussed and reviewed thoroughly in preparation for the next unit.  Important Concepts:  • inflection  • uses of nouns:  • subject noun, predicate noun, possessive noun, indirect object, direct object, object of a preposition  • cases:  • Nominative, Genitive, Dative, Accusative, Ablative	The city of Pompeii - landmarks & daily life	CLC pp. 28-38 UBR pp. 30-31 (Roman towns)
3 (3 weeks)	Students learn to decline nouns of the 1st and 2nd declensions.  Important Terminology:	Exploring the Pompeiian forum	CLC pp. 40-52 UBR pp. 74-75

4	Students learn to conjugate regular verbs in the imperfect tense as well as the irregular verb <i>esse</i> .	Roman	CLC pp. 54-68
(3 weeks)		theaters	UBR pp. 56-57
	<ul> <li>Important Concepts:</li> <li>imperfect = continuous or repetitive past action</li> <li>"was verb-ing;" "used to verb"</li> <li>conjugation rules &amp; endings</li> </ul>		
5	Students learn to conjugate verbs in the perfect tense.	Slavery in the	CLC pp. 70-82
(3 weeks)		Roman Empire	UBR p. 53
	Important Concepts:		

Unit	Grammar Topic	Cultural Topic	Textual References
6 (3 weeks)	Students revisit topics from units 2-3 (usage of nouns in Latin) with the goal of automaticity in recognizing cases & jobs in reading.	Roman beliefs concerning death and the afterlife	CLC pp. 84-98 UBR p. 49, 62-63
	Important Terminology: • parsing nouns		
7 (3 weeks)	Students are introduced to noun-adjective agreement and the declining of adjectives.	Gladiatorial games	CLC pp. 100-114 UBR pp. 58-59
	Important Terminology:  • 2-1-2 adjectives		
8 (3 weeks)	Students learn to decline 3rd declension nouns (both masculine/feminine & neuter)	The Baths in Pompeii	CLC pp. 116-130 UBR pp. 60-61
9 (3 weeks)	Students revisit the topic of noun-adjective agreement, using nouns & adjectives of differing declensions.	Educational practices in the Roman Empire	CLC pp. 132-146 UBR pp. 50-51
10 (3 weeks)	Students learn how to recognize & form positive imperatives.	Politics in Pompeii & the wider Roman Empire	CLC pp. 148-162
11 (3 weeks)	Students memorize demonstrative adjectives <i>hic</i> and <i>ille</i> in their entirety.	Eruption of Vesuvius & the destruction of Pompeii	CLC pp. 164-178

## **7th Grade Latin - Year at a Glance**

Primary Text: Cambridge Latin Course Units 2-3 Secondary Text: Usborne Book of the Romans

Unit	Grammar Topic	Cultural Topic	Text References
Review (2 weeks)	Students review all noun and verb information from the previous year along with high frequency vocabulary from the previous year.  Important Terminology/Concepts:  inflection verbs - principal parts, person, #, tense, present/imperfect/perfect endings noun - jobs, cases, genders, 1-3 declension endings		
13 (3 weeks)	Students review the irregular verb esse and learn the three irregular verbs posse, velle, nolle in the present tense.  Important Concepts:  • complementary infinitives	Introduction to Roman Britain in the 1st century A.D.  Richness of pre-Roman Celtic civilization.	CLC Unit 2 pp. 2-22  UBR pp. 54-55 (use of currency & trade; helpful when discussing advanced nature of Celtic society)
14 (3 weeks)	Students review the formation of positive imperatives and learn how to form negative imperatives along with being introduced to the vocative.	History of Romans in Britain & Romanization - to what extent did Romans demand conformation?	CLC Unit 2 pp. 24-42 UBR pp. 22-23, 26-27, 70-73

15 (3 weeks)	Students learn to recognize relative clauses in Latin.  Important Concepts:  • English grammar  • sentence vs. clause; independent vs. dependent clause; antecedent  • objective vs. subject case in English - who vs. whom  • relative pronoun agreement - gender/# determined by antecedent, case by how it's used in relative clause	Celtic allies and enemies of Rome - how did Rome deal with rebellion and famous Celtic heroes?	CLC Unit 2 pp. 44-58 UBR pp. 56-57
16 (3 weeks)	Students learn how to conjugate verbs in the pluperfect tense and solidify skill of parsing aspects of verbs.	Palace at Fishbourne and Roman client-kings.	CLC Unit 2 pp. 60-74
17 (3 weeks)	Students memorize all personal pronouns - 1st, 2nd, and 3rd; singular and plural.  Important terminology:  • subjective vs. objective case pronouns in English  ○ I/me, he/him, she/her, we/us, they/them	Introduction to Alexandria, Egypt - historical background and major features of the city in the 1st century A.D.	CLC Unit 2 pp. 76-92

Unit	Grammar Topic	Cultural Topic	Textual References
18 (3 weeks)	Students learn 4th and 5th declension noun endings & 3rd declension adjective endings. Further honing of the skill of parsing noun-adjective phrases & mastery of all noun endings.	Glassblowing and the history of leadership and ethnic relations within Alexandria. (Further enrichment: discussion over the benefits of mechanizing glass making vs. hand blown glass)	CLC Unit 2 pp. 94-112
19 (3 weeks)	Students learn how to form the vocative in Latin and review the concept of active and passive voice in preparation for learning about participles.	The cult of Isis - importance within Alexandria and the assimilation of deities in general.	CLC Unit 2 pp. 114-132 UBR pp. 62-67; 20-21
20 (3 weeks)	Students learn how to form and use present active participles.  Important Terminology:  • participle - verbal adjective	Medicinal practices and science in the classical world.	CLC Unit 2 pp. 134-150 UBR pp. 68-69
21 (3 weeks)	Students learn how to form and use perfect passive participles and continue to practice using present active participles.  Important Terminology:  • parsing of participles - gender, number, case, tense, voice  • ablative of agent	Introduction to Aquae Sulis and natural hot springs.	CLC Unit 3 pp. 2-20

22 (3 weeks)	Students learn how to recognize perfect active participles vs. passive participles, sequence/meaning of tenses in relation to finite verbs, and formation of degrees of adverbs.	The role and influence of curses and superstition at Aquae Sulis.	CLC Unit 3 pp. 22-36
23 (3 weeks)	Review of three types of known participles with emphasis given to composing English and Latin sentences with each.	Roman religious beliefs - assimilation and roles of religious officials.	CLC Unit 3 pp. 38-54

### 8th Grade Latin - Year at a Glance

Primary Text: Cambridge Latin Course Units 3 Secondary Text: Oxford Latin Reader

Unit	Grammar Topic	Cultural Topic	Text References
Review (2-3 weeks)	Students review all noun, verb, and adjective information learned in previous years along with high frequency vocabulary from years 1-2.		
	<ul> <li>Important Terminology/Concepts:</li> <li>inflection</li> <li>verbs - all indicative and imperative mood information</li> <li>noun - all 5 declensions</li> <li>adjectives - 2-1-2 and 3rd declension along with degrees &amp; participles</li> </ul>		
24 (3 weeks)	Students are introduced to the general concept of the subjunctive, learning to form the Imperfect and Pluperfect Subjunctives while learning about the dependent use of the Subjunctive in cum clauses.	Roman roads and travel throughout the empire.	CLC Unit 3 pp. 56-70 OLR pp. 58-59 (de Bello Gallico 4.20-22)
	<ul> <li>Important Concepts:</li> <li>Mood (students now must parse all 5 aspects of verbs (person, #, tense, mood, voice)</li> <li>cum circumstantial clauses</li> </ul>		
	Original Text:  • instructor begins to walk students through portions of Caesar's de Bello Gallico book 4, when he invades Britain for the first time		
25 (3 weeks)	Students learn the second dependent use of the subjunctive - indirect questions. (continue with <i>de Bello Gallico</i> )	Structure of Roman army & the lives of soldiers.	CLC Unit 3 pp. 72-88 OLR pp. 58-59 (de Bello Gallico 4.20-22)

26 (3 weeks)	Students learn the third dependent use of the subjunctive - purpose clauses.  Students start to recognize the gerundive/future passive participle and passive periphrastic constructions with the dative of agent, though formal instruction in these topics doesn't occur yet.  Important Concepts:  • intent of agent Original Text:	Discussion and memorization of the cursus honorum and the basic structure of a Roman legion.	CLC Unit 3 pp. 90-104 OLR pp. 170-173 (ab urbe condita 21.1)
	<ul> <li>instructor begins to walk students, sentence by sentence, through book 21 of Livy's ab urbe condita discussing the 2nd Punic War and Hannibal as a leader</li> </ul>		
27 (3 weeks)	Students learn to use the subjunctive in indirect commands and result clauses, focusing on the differences between result and purpose. They become more familiar with recognizing the meaning of the passive periphrastic, although still not forming it as yet.	Organization of legionary fortress and Hadrian's wall.	CLC Unit 3 pp. 106-120 OLR pp. 170-173 (ab urbe condita 21.1)
28 (3 weeks)	Students learn to recognize the ablative of means and differentiate between expressions of time while continuing to develop their list of impersonal verbs.  Important concepts:  ablative of means - "built-in" words balative of time when vs. accusative of duration of time impersonal verbs with accusative vs. dative	Exploration of the archaeological process and the study of inscriptions.	CLC Unit 3 pp. 122-142 OLR pp. 170-173 (ab urbe condita 21.1)

Unit	Grammar Topic	Cultural Topic	Textual References
29 (3 weeks)	Students learn how to form the passive voice in the Present and Imperfect tenses and to express purpose with the relative pronoun and ubi rather than simply with "ut"  Important Terminology:  • all relative pronouns must be memorized	The Roman forum and the history of Rome and Judaism/Battle at Masada. Students memorize the emperors from Augustus through Domitian.	CLC Unit 3 pp. 144-166
30 (3 weeks)	Students learn how to form the passive voice in the Perfect and Pluperfect Tenses and become familiar with the Locative.  Original Text:  • Aeneid 1.418-440	Roman engineering feats and the Arch of Titus.	CLC Unit 3 pp. 168-182 Aeneid 1.418-440
31 (3 weeks)	Students learn to recognize and use the ablative absolute.	Layout of the city of Rome (1st century) and the patronage system.	CLC Unit 3 pp. 185-202 Aeneid 1.418-440
32 (3 weeks)	Students learn how to form future active & passive participles (gerundive).  Original Text:  • Petronius' Satyricon (excerpts from Trimalchio's dinner)	Roman religious beliefs and philosophical schools	CLC Unit 3 pp. 204-220
33 (3 weeks)	Students learn to form the future and future perfect tenses in both active and passive voices.	Roman entertainment - Circus Maximus, theater, ludi	CLC Unit 3 pp. 222-238
34 (3 weeks)	Students learn to recognize and form deponent verbs and the present passive infinitive.	manumission and the lives of freedmen/women	CLC Unit 3 pp. 240-258

### Sixth Grade History - Year at a Glance

### First Semester

#### **Teacher Resources:**

Resource Library - History and Geography 6th Grade Core Knowledge; World Deserts; Ancient Greece and Rome; The Enlightenment TG - World Deserts, Ancient Greece and Rome Student Reader, Timeline Cards

<u>Student Resource:</u> Core Knowledge Workbook (CK), Knowledge Unit 6th Grade *World Cultures #1-4 (KU)* 

Month	Торіс	Text
August (and 2 weeks into September)	HISTORY  Judaism and Christianity:  Basic Ideas in Common, Central Ideas/Moral Teachings, Torah,  New Testament and Sermon on the Mount, Covenant, Law,  Justice and Social Responsibility	CK KU #1
	GEOGRAPHY Review: Continents and Major Oceans Longitude and Latitude, Coordinates and Degrees Climate Zones and Time Zones Prime Meridian and International Date Line Arctic and Antarctic Circles Great Deserts - Sahara, Kalahari, Gobi, Mojave, Chihuahua, Sonoran, and Atacama	
September - October (to end of 1st quarter)	Ancient Greece: Polis, Democratic Government, Assembly, Suffrage, Classical "Ideal" of Human Life, Hellenism Greek, Persian, and Peloponnesian Wars  Key Figures - Pericles, Socrates, Plato, Aristotle, Alexander the Great	CK KU #1
	GEOGRAPHY  Student Will Learn: Middle East, Anatolian and Arabian Peninsulas, Tigris and Euphrates Rivers, Atlas and Taurus Mountains	

October -	HISTORY	CK
November		KU #2
	Ancient Rome:	Sections 1-2
	Roman Republic, Class and Status, Roman Government, Punic	
	Wars, Pax Romana, Roman Law, Christianity in the Roman	KU #3
	Empire, Roman Persecution, Decline and Fall	Sections 1 &
		3
	<u>Key Figures</u> - Julius Caesar, Augustus Caesar, Constantine the Great	
	GEOGRAPHY	
	Student Will Learn: Greece, Rome, Mediterranean, Red,	
	Black and Arabian Seas, Persian Gulf	
December	HISTORY	CK KU #4
	Enlightenment:	Sections 1 &
	Science and Human Reason	3
	(Isaac Newton and Descartes)	
	TT	
	Human Nature	
	(Thomas Hobbes and John Locke)	
	Enlightenment in the United, Natural Rights, Separation of	
	Powers	
	(Jefferson and Montesquieu)	

#### **Teacher Resources:**

Resource Library - History and Geography 6th Grade Core Knowledge; The French Revolution and Romanticism; Industrialism, Capitalism, and Socialism; Immigration and Industrialization and Urbanization

TG - The Enlightenment, The French Revolution, and Romanticism; The Industrial Revolution: Changes and Challenges;

Heroes and Villains Independence for Latin America Student Reader, Timeline Cards

<u>Student Resource:</u> Core Knowledge Workbook (CK), Knowledge Unit 6th Grade *World Cultures #5-9 (KU)* 

Month	Торіс	Text
January	French Revolution: Results of the Enlightenment, English/American Revolutionary Movements, The Old Regime, 1789-From the Three Estates to the National Assembly, Reign of Terror, First French Empire  Key Figures - Louis XVI, Marie Antoinette, Napoleon Bonaparte  GEOGRAPHY  Student Can Label: France, Europe, Great Britain, Russia	CK KU #5 Section 1
February	Romanticism: Cultural Movement, Jean-Jacques Rousseau and Man's State of Nature, Romanticism in Literature, Visual Arts, and Music	CK

March	Industrial Revolution: Beginnings, Transportation, Steam Power, Textiles, Iron and Steel Mills, Factories  Capitalism and Socialism: Law of Supply and Demand, Social Gaps, Alternative to Capitalism, Public Ownership, Marxism, Communism, Class Struggle, Opposition to all Private Property  Key Figures - Adam Smith, Marx, Engels	CK KU #6 Sections 1 & 3
April	Latin America: Causes and Effects, Haitian Revolution, Mexican Revolution, Liberators, New Nations, Brazilian Independence  GEOGRAPHY  Student Can Label: Central and South America Countries: Mexico, Panama, Brazil, Argentina Cities: Caracas, Bogota, Quito, Lima, Santiago, La Paz, Buenos Aires, Rio de Janeiro Major Features: Yucatan Peninsula, Andes Mountains, Pampas, Amazon River, Rio de la Plata	CK KU #7 Sections 2-3 KU #8 Sections 2-3 KU #9 Section 1
May	Immigration, Industrialization, Urbanization: Immigrant Waves, Countries of Origin/Cities of Destination, Tension, Post-Civil War Boom, The Condition of Labor, Big Business, Industry and Enterprise  Reform: Populism, Progressivism, African-American Reform, Women's Suffrage, Socialist Critique of America  Student Can Label: New York, Chicago, Philadelphia, Detroit, Cleveland, Boston, San Francisco, Southern and Eastern Europe, Germany, Ireland, China	CK KU #10 Section 1

# <u>Seventh Grade History - Year at a Glance</u>

**Teacher Resources:** 

A History of US: An Age of Extremes, A History of US: War, Peace, and All That Jazz - Hakim

Heroes and Villains

Knowledge Units Texas History #1-10

Student Resource: Knowledge Units Texas History (KU)

Month	Topic	Text
August -	TEXAS HISTORY	
October (quarter 1)	<u>Pre-History:</u> First Texans, Pre-History of Texas Native Texas Cultures	KU #2 lessons 1-4 lessons 5-8
	Conquest and Settlement: Soldiers & The Conquistadors Saints & Spanish Missions Settlers & Settlements in Texas	KU #3 lessons 1-3 lessons 4-5 lesson 6
	GEOGRAPHY	KU #1 lessons 1-8
October	HISTORY	
	<u>Spanish Empire:</u> Fight for the New World Empresarios and Tyrants	KU #4 lessons 1-3 lessons 4-6
November	HISTORY	
	<u>Mexico and Revolution:</u> On the Brink of War Sorrow Turns to Victory	KU #5 lessons 1-3 lessons 4-6
December	HISTORY	
	Republic and State of Texas:  Republic of Texas  Great State of Texas  Civil War:	KU #6 lessons 1-4 lessons 5-7
	Confederate State of Texas <u>Reconstruction:</u> Texas Survives Reconstruction	lessons 8-9 KU #7 lessons 1-2

<u>Second Semester</u>		
Month	Торіс	Text Reference
January	HISTORY	
	<u>Reconstruction:</u> Texas Indian Wars Texas Kingdoms	KU #7 lessons 3-6 lessons 7-8
	<u>20th Century:</u> Dawning of Modern Age Prohibition, Depression, and War	KU #8 lessons 1-4 lessons 5-7
	<u>Texas Government:</u> Government of Texas	KU #10 lessons 5-6
February - March (to end of 3rd quarter)	HISTORY  America Becomes a World Power:  Expansion of US Navy; Annexation of Hawaii; Spanish-American  War; Imperialism; Panama Canal	
	World War I: Part 1  European Nationalism, Militarism and Colonialism; British Empire; Italy; German Nationalism; European Imperialism Part 2  Allies and Central Powers; Western and Eastern Front; War of Attrition; Neutrality; Armistice Day; Treaty of Versailles; Wilson's 14 Points	
	GEOGRAPHY	
	Student Can Label: Western and Central Europe, to include: major mountains, rivers, seas, and cities	
	<u>Important Dates:</u> WWI: 1914-1918 US joins WWI: 1917 Treaty of Versailles: 1918	
March	HISTORY  Russian Revolution:  Part 1  Russian Tension; Revolution of 1905  Part 2  Russo-Japanese War; Nicholas II and Alexandra; Economic	

# Part 3 Revolution of 1917 (March and October); Civil War

#### **GEOGRAPHY**

**Student Can Label:** Major cities, resources, and geographical information of Russia

#### April -May

#### **HISTORY**

America from the Twenties to the New Deal:
Isolationism; "Roaring Twenties;" Women's Suffrage; Harlem
Renaissance; Technology

The GreatDepression and New Deal:
Great Depression(Wall Street Crash); Smoot-Hawley Tariff Act;
Mass Unemployment; Franklin Delano Roosevelt; New Deal

#### World War II

Part 1
Rise of Totalitarianism in Europe
Part 2

Hitler and the Treaty of Versailles; Munich Agreement; Soviet-Natzi Non-Aggression Pact; Blitzkrie;, Britain; America; Nazi Invasion of Soviet Union; Holocaust; El Alamein; D-Day; Battle of the Bulge; Yalta, Germany Surrenders Part 3

Japan's Rise to Power; Pearl Harbor; Japanese Americans and Internment; Bataan Death March; Midway; Guadalcanal; Iwo Jima; Surrender of Japan; Atom Bombs; Potsdam Conference; Nuremberg Trials; United Nations

#### **GEOGRAPHY**

**Student Can Label:** Major geographical features within Eastern and Western Europe and Russia

#### **Important Dates**

Wall Street Crash: 1929 Great Depression: 1929-1939 Nazi Germany invades Poland: 1939 Attack on Pearl Harbor: December 7, 1941 Germany Surrenders: May, 1945 United Nations established: September, 1945

### **Eighth Grade History - Year at a Glance**

#### Semester 1

#### **Teacher Resources:**

A History of the United States and Its People - Eggleston A History of the US: The First Americans, Making Thirteen Colonies, From Colonies to Country, The New Nation, Liberty For All?, Reconstruction, All the People; War, Terrible War - Hakim

Heroes and Villains

Resource Library - Primary Sources, US Constitution Packet Knowledge Units 8th Grade *United States History* 

Student Resource: Knowledge Unit 8th Grade United States History #1-5 (KU)

Торіс	Text
HISTORY	
US History - Exploration and Discovery Exploration and Discovery of the US Early Colonies - Jamestown & Plymouth Colonial Growth - New England, Middle & Southern Colonies; Slavery	KU #1 lessons 1-3 lessons 4-6 lessons 7-9
HISTORY	
<u>US History - Colonial Life</u> Colonial Growth, Policy, and the Great Awakening Colonial Dissatisfaction; Colonial Wars; French & Indian War British Parliamentary Actions; Unrest in the Colonies	KU #2 lessons 1-3 lessons 4-6 lessons 7-8
HISTORY	
US History - Revolutionary War Pre-Revolutionary Thought; 1st Continental Congress; Lexington & Concord Washington; Revolutionary War; Declaration of Independence	KU #3 lessons 1-3 lessons 4-6
	HISTORY  US History - Exploration and Discovery Exploration and Discovery of the US Early Colonies - Jamestown & Plymouth Colonial Growth - New England, Middle & Southern Colonies; Slavery  HISTORY  US History - Colonial Life Colonial Growth, Policy, and the Great Awakening Colonial Dissatisfaction; Colonial Wars; French & Indian War British Parliamentary Actions; Unrest in the Colonies  HISTORY  US History - Revolutionary War Pre-Revolutionary Thought; 1st Continental Congress; Lexington & Concord

November	HISTORY	
	<u>US History - Revolutionary War</u> Revolutionary War; Articles of Confederation	KU #3 lessons 7-9
	US History - Nation Building and the Constitution Nation Building; Weakness of Articles of Confederation Philadelphia Convention, Constitution of the United States Ratification of the Constitution; Federalist Papers, Bill of Rights	KU #4 lessons 1-3 lessons 4-6 lessons 7-9
December	HISTORY	
	<u>Early American Republic</u> Early Republic; Washington's Administration Washington and Adams Administration Political Parties; Jefferson's Administration	KU #5 lessons 1-3 lessons 4-6 lessons 7-9

#### **Teacher Resources:**

A History of the United States and Its People - Eggleston

A History of US: The New Nation, Liberty For All?, Reconstruction, All the People; War,

 $Terrible\ War$  - Hakim

Heroes and Villains

Resource Library - Primary Sources

Student Resource: Knowledge Unit 8th Grade United States History #6-10 (KU)

Month	Торіс	Text
January	HISTORY  Early American Republic  Westward Expansion; War of 1812  Era of Good Feelings; Policy Changes  Jackson	KU lessons 1-2 lessons 3-5 lessons 6-8
February	HISTORY  Growth of the American Republic  Reform  Manifest Destiny  Prelude to War	KU #7 lessons 1-3 lessons 4-6 lessons 7-8
March (to spring break)	HISTORY <u>Countdown to War</u> Slavery  Divided Country; Secession; Early Days of the Civil War	KU #8 lessons 1-3 lessons 4-9
April	Civil War  Pursuing the War; Western Theater; Eastern Theater; Home Front; Union Gains Major Losses; Unpopular War; End of the Civil War; Lincoln Assassination	KU #9 lessons 1-5 lessons 6-9

Iay	HISTORY	
	Reconstruction	KU #10
	(STAAR Content Review)	lessons 1-9
	Broad Survey of World and American History European Colonialism; Cold War; Civil Rights Vietnam; Middle East; End of Cold War	

### Ninth Grade History - Year at a Glance

#### **Teacher Resources:**

Western Civilization (includes The Story of the Greek People and The Story of the Roman People

Resource Library - A Little History of the World

#### **Student Resource:**

Western Civilization (includes The Story of the Greek People and The Story of the Roman People

Knowledge Unit World Geography

Month	Topic
August - October	HISTORY <u>Western Civilization Overview &amp; Introduction</u> Definition of Western Civilization  Egyptians; Mesopotamia; Hebrews
(1st Quarter)	<u>Hebrews</u> Contributions & History
	Ancient Greece  I. Characteristics; Early Greek Life; Legends & Mythology  II. Sparta; Early Contributions of Sparta; How Spartans Lived  III. Early Athens, the Laws of Solon  IV. Rule of Pisistratus & the Alcmaeonidae  V. Olympics; Greek Colonies and the Tyrants  VI. Greco-Persian Wars
	<b>GEOGRAPHY</b> <u>Foundations and Essential of Geography</u> United States and Canada
November	HISTORY
	Ancient Greece  I. Pericles  II. Peloponnesian War  III. Sicilian Expedition  IV. Fall of Athens
	<b>GEOGRAPHY</b> <u>World Geography</u> Latin America Europe

December	HISTORY
	Ancient Greece:  I. Rule of Sparta; Thebes  II. Pre-Socratic and Socratic Philosophers  III. Philip of Macedon; Alexander the Great  IV. Alexander the Great; Hellenism

Month	Торіс	
January - March (3rd quarter)	HISTORY  Ancient Rome  I. Characteristics; Early Roman Life  II. Legends of the Seven Kings of Rome  III. Tarquin  IV. Plebeians and Early Civil Rights  V. Roman Conquests in Italy  VI. Early Roman Republic  VII. Carthage and the Punic Wars  VIII. Rome Becomes Capital of the World	
Annil Mar	GEOGRAPHY  World Geography  Russia  East & South Asia	
April - May (4th quarter)	Ancient Rome  I. The Gracchi and the Rise of Marius  II. The Rule of Sula  III. Caesar and the First Triumvirate  IV. Augustus  V. Christianity  VI. The Twelve Caesars  VII. The Five Good Emperors  VIII. Marcus Aurelius to Constantine  GEOGRAPHY  World Geography  Australia & New Zealand  North Africa, Sub-Saharan Africa  Middle East	

# <u>Tenth Grade History - Year at a Glance</u>

Resources:

Western Civilization II
Resource Library - A Little History of the World

<u>First Semester</u>				
Month	Торіс			
August - October (1st	Western Europe During the Early Middle Ages  I. Roman Empire, Ostrogoths, Lombards, Franks, Charlemagne, Otto  II. Anglo-Saxons, Christianity in the British Isles, Fusion of Germans and Romans			
Quarter)	Eastern Europe During the Early Middle Ages I. Eastern Roman Empire, Justinian, Asiatic Foes II. Byzantine Civilization, Constantinople			
	Christianity in the East & the West  I. Development, Eastern Christianity, Western Christianity, the Papacy  II. Monasticism, Life of the Monks, Spread of Christianity, Eastern &			
	Western Schism, Greek & Roman Churches			
	The Orient Against the Occident  I. Arabia, Mohammed, Islam and the Koran, Expansion, Caliphate  II. Civilization, Islam			
	The Northmen and Normans Scandinavia and the Northmen, Vikings, Paganism, Northmen in the West & East			
November	The Northmen and the Normans  Normandy & the Normans, Conquest of England, Norman Conquest of England, Normans in History			
	<u>Feudalism</u> I. Rise of Feudalism, Government, Justice, Warfare, Castle Life, Knighthood and Chivalry II. Industry, Village Life, Serfdom, Decline			
	<u>The Papacy and the Holy Roman Empire</u> Medieval Church, Worship and Doctrine, Jurisdiction, Clergy			
December	The Papacy and the Holy Roman Empire			

Friars, Papal Power, Popes and Emperors, Significance of the Medieval
Church

- The Occident and the Orient
  Crusades Causes, 1st Crusade, Crusader States
  II. 2nd-4th Crusades, Latin Empire
  III. Results of the Crusades I.

Month	Торіс
January - March	The Mongols and Ottoman Turks  I. Conquests, China and India, Eastern Europe II. Ottoman Turks, Southeast Europe
(3rd Quarter)	European Nations During the Later Middle Ages  I. Growth of Nations, England and William the Conqueror, Henry II, Magna Carta, Parliament, Edward I II. France, Hundred Years' War, Spain, Austria and the Swiss Confederation, Germany
	European Cities During the Later Middle Ages  I. Growth of Cities, Life, Industry, Trade, Commerce II. Money and Banking, Italian Cities, Hanseatic League, Flanders
	Medieval Civilization  I. National Languages, Literatures, Cathedrals, Universities  II. Scholasticism, Science and Magic, Superstitions, Amusements & Festivals, Manners & Customs
April - May (4th	The Renaissance  I. Meaning, Revival of Learning, Paper and Printing, Art  II. Learning beyond Italy, Literature, Education, Science, Economics
quarter)	Geographical Discovery and Colonization Geography, Exploration, Prince Henry and Da Gama, Portugal, Columbus and Magellan, Indians, Spain, Colonialism
	The Reformation  I. Papal Decline, Heresies, Martin Luther  II. Zwingli and Calvin, English Reformation, Protestantism  III. Catholic Counter-Reformation, Philip II, Netherlands, Elizabeth  I, Huguenot Wars, Thirty Years' War
	Absolutism  I. Divine Right of Kings, Stuarts, Cromwell, Commonwealth and the Protectorate  II. Restoration and the Glorious Revolution, Absolutism of Louis XIV, The Grand Monarch

# **Eleventh Grade History - Year at a Glance**

#### Resources:

America the Last Best Hope Western Civilization II Resource Library - A Little History of the World

Month	Торіс			
August - October (1st Quarter)	The Empires of Spain and England I. Spanish Conquest and Empire II. Calvinism III. Henry VIII and the English Reformation IV. Elizabeth I and the Spanish Armada  English Colonies and Constitutional Crisis I. Jamestown and Plymouth II. English Civil War III. John Locke and the Glorious Revolution IV. King Philip's War and the Salem Witch Trials			
November	18th Century America I. Atlantic Slave Trade II. Benjamin Franklin and the Enlightenment III. Jonathan Edwards and the Great Awakening IV. George Washington and the French & Indian War			
December	Revolutionary War and the American Founding  I. John Adams and the Boston Massacre  II. Thomas Jefferson and the Declaration of Independence  III. The New York, Philadelphia, and Southern Campaigns  IV. The Constitutional Convention			

Month	Торіс
January - March (3rd	The Early Republic  I. Alexander Hamilton and the Federalists  II. French Revolution and Napoleon  III. Jeffersonian Democracy  IV. War of 1812
Quarter)	<u>Democracy in America</u> I. King Cotton and the Industrial Revolution II. Jacksonian Democrats III. Trail of Tears IV. Oregon Trail
April - May (4th quarter)	Gathering Storm  I. Mexican-American War  II. Frederick Douglass and Dred Scott  III. Underground Railroad and Bleeding Kansas  IV. Lincoln-Douglass Debates
	The Civil War  I. Abraham Lincoln and Secession  II. Bull-Run, Antietam, Gettysburg, the Eastern Theater  III. Vicksburg, the Western Theater, Sherman's March to the Sea  IV. Reconstruction

# <u>Twelfth Grade History - Year at a Glance</u>

#### Resources:

America the Last Best Hope Western Civilization II Resource Library - A Little History of the World

Month	Торіс
August - October (1st Quarter)	The Gilded Age  I. Southern Reconstruction  II. Jane Adams, Immigration, Urbanization  III. The Lakota Wars  IV. The Panic of 1863 and Populism  The Progressive Era  I. Teddy Roosevelt and the Rough Riders  II. Woodrow Wilson and Progressive Political Ideology  III. W.E.B. Du Bois and the Jim Crow South
November	WWI I. Franco-Prussian War, Imperialism, Schlieffen Plan II. Battles of Verdun, the Somme, and Passchendaele III. The Russian Revolution and the Civil War IV. Battle of Belleau Wood and the Meuse-Argonne Offensive
December	The Interwar Period  I. Treaty of Versailles  II. Weimar Republic  III. Roaring Twenties  IV. FDR, the Great Depression, the Neal Deal

Month	Торіс				
January - March (3rd Quarter)	WWII  I. Joseph Stalin and Adolf Hitler II. Winston Churchill, Battle of Britain III. European Theater, East & West, the Pacific Theater IV. The Holocaust  Cold War I. Korean War II. MLK and Civil Rights III. Berlin Wall, Cuban Missile Crisis IV. Space Race				
April - May (4th quarter)	The War in Vietnam  I. LBJ's Administration  II. The Draft, Anti-War Movement  III. Tet Offensive  IV. The Pentagon Papers  Recent History  I. Ronald Reagan and Margaret Thatcher  II. Fall of the Berlin Wall  III. The War on Terror, Wars in Iraq and Afghanistan  IV. Globalization, Digital Revolution, Rise of China				

# **Sixth Grade Literature Overview**

Historical Period	Theme	Touchstones	Grammar
Ancient Greece and Rome	Adventure	Symbolism Plot Arcs How Stories Work	Get Smart

Student Texts	Optional Texts	Teacher Resources
Summer: Greek Myths	Children's Aeneid Children's Dante	The Art of Poetry
Black Ships Before Troy	Aesop's Fables	How to Read a Book
The Prince and the Pauper	King Arthur	
A Midsummer Night's Dream	Journeys of Odysseus	
Kidnapped	Short Stories (what	
The Bronze Bow	kind?)	

# **Seventh Grade Literature Overview**

Historical Period	Theme	Touchstones	Grammar
Texas History	Transformation	The Monomyth:	Get Smart
Renaissance	Through a	Archetypes and the Hero	
Reformation	Journey	Cycle	

Student Texts	Optional Texts	Teacher Resources
Summer: Around the World in 80 Days  Call of the Wild The Hobbit Robinson Crusoe The Tempest The Count of Monte Cristo	A Wrinkle in Time Treasure Island The Once and Future King Watership Down Cyrano de Bergerac The Gift of the Magi	The Hero with a Thousand Faces Mythopoeia

# **Eighth Grade Literature Overview**

Historical Period	Theme	Touchstones	Grammar
American - Discovery to Cold War	Expanding Personal Journey/Prejudice	Growth and Change	Stay Smart

Student Texts	Optional Texts	Teacher Resources
Summer: Animal Farm  To Kill a Mockingbird A Christmas Carol Lord of the Flies Merchant of Venice Diary of Anne Frank	The Strange Case of Dr. Jekyll and Mr. Hyde Death Comes for the Archbishop Rifles for Watie A Tree Grows in Brooklyn Short Stories - Poe, Hawthorne, Washington Irving, O. Henry	The Southern Critics - Glen Arbery

# **Ninth Grade Literature Overview**

Historical Period	Theme	Touchstones
Ancient History - Jerusalem	The Ancient Call to	Genres
Greece	Virtue: Fortitude,	Catharsis and the affect of literature
Rome	Justice, Prudence,	on the reader
(to the Battle of Milvian Bridge)	Temperance	(Epic, Drama, Oratory, Folklore)

(Hamilton) Antigone The Epic Cosm Electra The Meno	Student Texts	Optional Texts	Teacher Resources
Iliad Iphigenia at Aulis Odyssey Pericles' funeral oration Oresteia Flood narratives Oedipus Rex Epic of Gilgamesh Julius Caesar Vedic & Biblical excerpts	(Hamilton)  Iliad Odyssey Oresteia Oedipus Rex	Antigone Electra Iphigenia at Aulis Pericles' funeral oration Flood narratives Epic of Gilgamesh	The Tragic Abyss The Epic Cosmos The Meno

## **Tenth Grade Literature Overview**

Historical Period	Theme	Touchstones
Medieval - Constantine to Renaissance/Reformation	Faith and Free Will Pilgrimages	Epic vs. Novel (narration styles and meaning, frame tales)

Student Texts	Optional Texts	Teacher Resources
Summer: Beowulf  Canterbury Tales (selections) Paradise Lost (selections) Tale of Two Cities Frankenstein MacBeth	Utopia Sir Gawain and the Green Knight Mythopoeia and Eucatastrapohe - Tolkien The Faerie Queen Shakespeare's Sonnet sequence Murder in the Cathedral Henry V Dr. Faustus	Tradition and Individual Talent - Eliot Mythopoeia

## **Eleventh Grade Literature Overview**

Historical Period	Theme	Touchstones
Early Modern - Reformation to End of 19th Century American History emphasis	Thought and Consequence	Synoptic Reading - Literature as Philosophy

Student Texts	Optional Texts	Teacher Resources
Summer: The Scarlet Letter  Billy Budd Pride and Prejudice Huckleberry Finn The Great Gatsby Romeo and Juliet	Pygmalian Hedda Gabler The Importance of Being Earnest Rosencrantz and Guildenstern are Dead Age of Innocence Ethan Frome Henry James	Ideas Have Consequences - Richard Weaver Nicomachean Ethics

## <u>Twelfth Grade Literature Overview</u>

Historical Period	Theme	Touchstones
Modern - 19th Century to the Present Emphasis: American History/Government	What is the Best Life?	Active vs. Contemplative - apply what you have learned to life

Student Texts	Optional Texts	<b>Teacher Resources</b>
Summer: The Sun Also Rises Crime and Punishment Night The Inferno Hamlet Of Mice and Men	A Day in the Life of Ivan Denisovich The Death of Ivan Ilyich The Gulag Archipelago Jeeves and Wooster East of Eden Heart of Darkness The Old Man and the Sea Short Stories - O'Connor, Wolfe,	Symposium - Plato
	Waugh, Flaubert, Conrad	

#### 6th Grade Math - Year at a Glance

Textbook: *Pearson* 

#### <u>First Semester</u>

Month	Торіс	
August - October (1st quarter)	Numbers and Operations: Integers and Rational Numbers Multiplying and Dividing Fractions Fluency with Decimals Integer Operations	
October	Expressions, Equations, and Relationships:  Variables and Expressions	
November	Expressions, Equations, and Relationships: Equivalent Expressions Equations and Inequalities	
December	Expressions, Equations, and Relationships: Two-Variable Relationships	

#### Second Semester

Month	Topic
January	<u>Proportionality:</u> Ratios Rates Ratio Reasoning
February	Geometry: Area Volume Triangles & Triangle Properties
March	<u>Measurement and Data:</u> Data Displays Measures of Center and Variation
April	Personal Financial Literacy Banking Credit Paying for College Annual Salaries
May	Step-Up Lessons

### Seventh Grade Math - Year at a Glance

Textbook: *Pearson* 

#### **First Semester**

Month	Торіс
August	Numbers and Operations Rational Numbers Opposites and Absolute Value, Adding, Subtracting, Multiplying, & Dividing Rational Numbers Operations with Rational Numbers
September - October (end of 1st quarter)	Expressions, Equations, and Relationships Solving Simple Equations Writing & Solving Two-Step Equations Solving Simple Inequalities Writing Problem Situations
October - December	Measurement and Geometry Measuring Angles Types of Angles: Adjacent, Complementary, Supplementary, Vertical Sum of the Angles of a Triangle Center, Radius, Diameter Circumference & Area of a Circle Area of Semicircles and Quarter Circles Area of Composite Figures Nets Right Prisms: Surface Area and Volume Right Pyramids: Surface Area and Volume

#### **Second Semester**

Month	Торіс
January	Proportionality: Ratios & Rates Proportional Relationships Representing Linear Relationships Percents
February - March (end of 1st quarter)	Measuring and Data: Sampling Comparing Two Populations Probability Concepts Compound Events
March	<u>Pearson Financial Literacy</u> Economic Thinking
April - May	Step-Up Lessons Percents Greater than 100 & Less than 1 Percent Error Expanding & Factoring Algebraic Equations Solving Equations Using the Distributive Property Solving Multi-Step Inequalities

### <u>Algebra I - Course Overview</u>

**Topic 1 - Solving Equations & Inequalities** 

<b>Textual Reference</b>	Components	TEKS		
1-1	Solving Multi-Step Equations	5A, 1A, 1F		
Solving Equations with Variables on Both Sides		5A, 1F, 1A, 1C		
1-3	Literal Equations	12E, 1A, 1E		
Quiz (1-1, 1-2 & 1-3)				
1-4	Solving Proportions	5A, 1F, 1A		
1-6	Multi-Step Inequalities	5B, 1A, AD		
1-7	Compound Inequalities	5B, 1A, 1D		
Quiz (1-4, 1-6, & 1-7)				
	Topic 1 Test			

Topic 2 - An Introduction to Functions & Topic 3 - Linear Functions (Mixed)

Topic 3 Emedi Lunctions (Wilker)		
<b>Textual Reference</b>	Components	TEKS
3-1	Rate of Change & Slope	3B, 1D, 1G, 2G, 3A
3-3	Slope-Intercept Form	2B, 1F, 1A, 2C, 3A, 3B, 3C
3-2	Direct Variation	2D, 1D, 1G, 2C, 3C, 12E
	Quiz (3-1, 3-3, & 3-2)	
3-4	Point-Slope Form	2B, 1F, 1A, 2C, 3A, 3B, 3C, 12E
3-5	Standard Form	2B, 1F, 1G, 2A, 2C, 2G, 3A, 3C
2-4	Graphing a Function Rule	3C, 1D, 1A
Quiz (3-4, 3-5, & 2-4)		
	Topics 2 & 3 Part 1 Test *Bonus questions from Topic 1	
2-5	Writing a Function Rule	2C, 1A,1D, 1E

2-6	Formalizing Relations & Functions	12A, 1D, 1G	
2-7	Using Function Notation	2A, 1D, 1A, 12B	
	Quiz (2-5, 2-6, & 2-7)		
3-6	Parallel & Perpendicular Lines	2E, 2F, 1A, 2B, 2C, 3A	
3-7	Transformations of Linear Functions	3E, 1D, 1A, 3C, 12B	
	Quiz (3-6 & 3-7)		
3-8	Scatter Plots & Trend Lines	4C, 1D, 1A, 1F, 2B, 2C, 3A, 3B, 4A, 4B	
	<b>Topics 2 &amp; 3 Part 2 Test</b> *Bonus questions from Topic 1		

**Topic 4 - Systems of Linear Equations & Inequalities** 

Textual Reference	Components	TEKS
4-1	Solving Systems by Graphing	3F, 1D, 1A, 2I, 5C
4-2	Solving Systems Using Substitution	5C, 1F, 1A, 1G, 2I, 3G
4-3	Solving Systems Using Elimination	5C, 1G, 1A, 2I
	Quiz (4-1, 4-2, 4-3)	
4-4	Applications of Linear Systems	2I, 1A, 1E, 1G, 5C
4-5	Linear Inequalities	3D, 1G, 1D, 2H
4-6	Systems of Linear Inequalities	3H, 1D, 1F, 2H, 3D
	Quiz (4-4, 4-5, 4-6)	
	<b>Topic 4 Test</b> *Bonus questions from Topics 1, 2, & 3	

**Topic 5 - Exponents & Radicals** 

<b>Textual Reference</b>	Components	TEKS
5-1	Zero & Negative Exponents	11B, 1E, 1D
5-2	Multiplying Powers With the Same Base	11B, 1A, 1E
5-3	More Multiplication Properties of Exponents	11B, 1E, 1A
Quiz (5-1, 5-2, 5-3)		

5-4	Division Properties of Exponents	11B, 1A, 1E
5-5	Rational Exponents & Radicals	11B, 1E, 1A
5-6	Simplifying Radicals	11A, 1G, 1E
Quiz (5-4, 5-5, & 5-6)		
	<b>Topic 5 Test</b> *Bonus questions from Topics 1-4	

**Topic 6 - Sequences** 

<b>Textual Reference</b>	Components	TEKS
6-1	Arithmetic & Geometric Sequences	12D, 1E, 1A, 1F, 12B
6-2	Arithmetic Sequences in Recursive Form	12C, 1G, 1C, 1D, 12B, 12D
6-3	Geometric Sequences in Recursive Form	12C, 1C, 1A, 12B, 12D
	Quiz (6-1, 6-2, 6-3)	
	<b>Topic 6 Test</b> *Bonus questions from Topics 1-5	

**Topic 7 - Polynomials & Factoring** 

Textual Reference	Components	TEKS
7-1	Adding and Subtracting Polynomials	10A, 1A, 1E
7-2	Multiplying & Factoring	10D, 1G, 1E, 10B
7-3	Multiplying Binomials	10B, 1C, 1E, 10D
	Quiz (7-1, 7-2, 7-3)	
7-5	Factoring $x^2 + bx + c$	10E, 1B, 1C, 1E
7-6	Factoring $ax^2 + bx + c$	10E, 1E, 1C, 10D
	<b>Topic 7 Part 1 Test</b> *Bonus questions from Topics 1-6	
7-7 (bring in components of 7-4)	Factoring Special Cases	10B, 1C, 1A, 1D, 10F, 1G, 10E
7-8	Factoring By Grouping	10B, 1E, 1A
7-9	Simplifying Rational Expressions	10D, 1G, 1A, 10E, 10F
	Quiz (7-7, 7-8, 7-9)	

**Topic 7 Part 2 Test**\*Bonus questions from Topics 1-6

**Topic 8 - Quadratic Functions & Equations** 

Textual Reference	Components	TEKS
8-1	Quadratic Graphs & Their Properties	6A, 1D, 1B, 7A
8-2	Quadratic Functions	7A, 1D, 1A, 1C, 8B
8-3	Transformations of Quadratic Functions	7C, 1D, 1A, 1F, 7A
	Quiz (8-1, 8-2, 8-3)	
8-4	Vertex Form of a Quadratic Function	6B, 1D, 6A, 7A, 12B
	Topic 8 Part 1 Test *Bonus questions from Topics 1-7	
8-5	Solving Quadratic Functions	8A, 1C, 1D, 7A
8-6	Factoring to Solve Quadratic Functions	8A, 1E, 1A
	Quiz (8-4, 8-5, 8-6)	
8-7	Writing Quadratic Functions	6C, 1B, 1D, 7B
8-8	Completing the Square	8A, 1E, 1A
8-9	Quadratic Formula & Discriminant	8A, 1C, 1A, 1G
	Quiz (8-7, 8-8, & 8-9)	
	<b>Topic 7 Part 2 Test</b> *Bonus questions from Topics 1-7	

**Topic 9 - Exponential Functions & Equations** 

<b>Textual Reference</b>	Components	TEKS
9-1	Exponential Functions	9A, 1C, 1A, 1D, 9C, 9D, 12B
9-2	Exponential Growth & Decay	9B, 1A, 1G, 9C, 9D
9-3	Modeling Exponential Data	9E, 1E, 1C, 9A, 9B, 9C, 9D
	Quiz (9-1, 9-2, 9-3)	
	<b>Topic 9 Test</b> *Bonus questions from Topics 1-8	

## **Geometry - Course Overview**

**Topic 1 - Tools of Geometry** 

Textual Reference	Components	TEKS
1-1	Points, Lines, & Planes	
1-2	Measuring Segments	
1-3	Measuring Angles	
1-4	Exploring Angle Pairs	
Quiz (1-1, 1-2, 1-3, 1-4)		
1-5	Basic Constructions	
3-6	Constructing Parallel & Perpendicular Lines	
Topic 1 Test		

**Topic 2 - Reasoning & Proof** 

Textual Reference	Components	TEKS
2-1	Patterns & Conjectures	
2-2	Conditional Statements	
2-3	Biconditional Statements	
Quiz (2-1, 2-2, 2-3)		
2-4	Deductive Reasoning	
2-5	Reasoning in Algebra & Geometry	
2-6	Proving Angles Congruent	
	Quiz (2-4, 2-5, 2-6)	
	<b>Topic 2 Test</b> *Bonus questions from Topic 1	

**Topic 3 - Parallel & Perpendicular Lines** 

Textual Reference	Components	TEKS
3-1	Lines & Angles	
3-2	Properties of Parallel Lines	
3-3	Proving Lines Parallel	

Quiz (3-1, 3-2, 3-3)			
3-4	Parallel & Perpendicular Lines		
3-5	Parallel Lines & Triangles		
3-7	Equations of Lines in the Coordinate Plane		
	Quiz (3-4, 3-5, 3-7)		
3-8	Slopes of Parallel & Perpendicular Lines		
	<b>Topic 3 Test</b> *Bonus questions from Topics 1-2		

**Topic 4 - Congruent Triangles** 

Textual Reference	Components	TEKS
4-1	Congruent Figures	
4-2	Triangle Congruence by SSS and SAS	
	Quiz (4-1, 4-2)	
4-3	Triangle Congruence by ASA and AAS	
4-4	Using Corresponding Parts of Congruent Triangles	
4-5	Isosceles & Equilateral Triangles	
	Quiz (4-3, 4-4, 4-5)	
4-6	Congruence in Right Triangles	
	<b>Topic 4 Test</b> *Bonus questions from Topics 1-3	

**Topic 5 - Relationships Within Triangles** 

<b>Textual Reference</b>	Components	TEKS
5-1	Midpoint & Distance in the Coordinate Plane	
5-2	Midsegments of Triangles	
5-3	Perpendicular & Angle Bisectors	
	Quiz (5-1, 5-2, 5-3)	
5-4	Bisectors in Triangles	
5-5	Medians & Altitudes	

5-7	Inequalities in One Triangle	
Quiz (5-4, 5-5, 5-7)		
5-8	Inequalities in Two Triangles	
<b>Topic 5 Test</b> *Bonus questions from Topics 1-4		

**Topic 6 - Polygons & Quadrilaterals** 

<b>Textual Reference</b>	Components	TEKS
6-1	The Polygon Angle-Sum Theorems	
6-2	Properties of Parallelograms	
6-3	Proving That a Quadrilateral is a Parallelogram	
	Quiz (6-1, 6-2, 6-3)	
6-4	Properties of Rhombuses, Rectangles, & Squares	
6-5	Conditions for Rhombuses, Rectangles, & Squares	
6-6	Trapezoids & Squares	
Quiz (6-4, 6-5, 6-6)		
	<b>Topic 6 Test</b> *Bonus questions from Topics 1-5	

**Topic 7 - Coordinate Geometry** 

Textual Reference	Components	TEKS
7-1	Polygons in the Coordinate Plane	
7-2	Applying Coordinate Geometry	
7-3	Proofs Using Coordinate Geometry	
	Quiz (7-1, 7-2, 7-3)	
	<b>Topic 7 Test</b> *Bonus questions from Topics 1-6	

**Topic 8 - Transformational Geometry** 

Textual Reference	Components	TEKS
8-1	Translations	
8-2	Reflections	
8-3	Rotations	
	Quiz (8-1, 8-2, 8-3)	
8-4	Symmetry	
8-5	Compositions of Rigid Transformations	
8-6	Congruence Transformations	
	Quiz (8-6, 8-5, 8-7)	
8-7	Dilations	
8-8	Other Non-Rigid Transformations	
	Quiz (8-7, 8-8)	
	<b>Topic 8 Test</b> *Bonus questions from Topics 1-7	

**Topic 9 - Similarity** 

<b>Textual Reference</b>	Components	TEKS
9-1	Similar Polygons	
9-2	Similarity Transformations	
9-3	Proving Triangles Similar	
	Quiz (9-1, 9-2, 9-3)	
9-4	Similarity in Right Triangles	
9-5	Proportions in Triangles	
	Quiz (9-4, 9-5)	
	<b>Topic 9 Test</b> *Bonus questions from Topics 1-8	

**Topic 10 -Right Triangles & Trigonometry** 

Textual Reference	Components	TEKS
10-1	Pythagorean Theorem & Its Converse	
10-2	Special Right Triangles	
Quiz (10-1, 10-2)		
10-3	Trigonometry	
10-4	Angles of Elevation & Depression	
	Quiz (10-3, 10-4)	
	<b>Topic 10 Test</b> *Bonus questions from Topics 1-9	

**Topic 11 - Circle Measurement** 

<b>Textual Reference</b>	Components	TEKS
11-1	Circles & Arcs	
11-2	Radian Measure	
	Quiz (11-1, 11-2)	
11-3	Areas of Circles & Sectors	
11-4	Circles in the Coordinate Plane	
	Quiz (11-3, 11-4)	
	<b>Topic 11 Test</b> *Bonus questions from Topics 1-10	

**Topic 12 - Theorems About Circles** 

Textual Reference	Components	TEKS
12-1	Tangent Lines	
12-2	Chords & Arcs	
Quiz (12-1, 12-2)		
12-3	Inscribed Angles	
12-4	Angle Measures & Segment Lengths	

#### Quiz (12-3, 12-4)

**Topic 12 Test**\*Bonus questions from Topics 1-11

Topic 13 - Area

Textual Reference	Components	TEKS
13-1	Areas of Parallelograms & Triangles	
13-2	Areas of Trapezoids, Rhombuses, & Kites	
13-3	Areas of Regular Polygons	
Quiz (13-1, 13-2, 13-3)		
13-4	Perimeters & Areas of Similar Figures	
13-5	Trigonometry & Area	
	Quiz (13-4, 13-5)	
	<b>Topic 13 Test</b> *Bonus questions from Topics 1-12	

**Topic 14 - Surface Area & Volume** 

Textual Reference	Components	TEKS
14-1	Three-Dimensional Figures & Cross Sections	
14-2	Surface Areas of Prisms & Cylinders	
14-3	Surface Areas of Pyramids & Cones	
	Quiz (14-1, 14-2, 14-3)	
14-4	Volumes of Prisms & Cylinders	
14-5	Volumes of Pyramids & Cones	
	Quiz (14-4, 14-5)	
14-6	Surface Areas & Volumes of Spheres	
14-7	Surface Areas & Volumes of Related Solids	
	Quiz (14-6, 14-7)	
	<b>Topic 14 Test</b> *Bonus questions from Topics 1-13	

Topic 15 - Probability

<b>Textual Reference</b>	Components	TEKS
15-1	Experimental & Theoretical Probability	
15-2	Geometric Probability	
15-3	Permutations & Combinations	
	Quiz (15-1, 15-2, 15-3)	
15-4	Compound Probability	
15-5	Conditional Probability with Frequency Tables	
15-6	Conditional Probability Formulas	
	Quiz (15-4, 15-5, 15-6)	
	<b>Topic 15 Test</b> *Bonus questions from Topics 1-14	

# <u>Algebra II - Course Overview</u>

**Topic 2 - Absolute Value Equations & Functions** 

Textual Reference	Components	TEKS	
1-1	Relations & Functions		
1-2	Attributes of Functions		
	Quiz (1-1, 1-2)		
2-3	Attributes of Absolute Value Functions		
2-4	Transformations of Absolute Value Functions		
2-5	Graphing Absolute Value Inequalities		
	Quiz (2-1, 2-2, 2-3)		
2-1	Absolute Value Equations		
2-2	Absolute Value Inequalities		
	Quiz (2-4, 2-5)		
	Topic 2 Test		

**Topic 3 - Systems of Linear Equations** 

<b>Textual Reference</b>	Components	TEKS
3-1	Solving Systems Using Tables & Graphs	
3-2	Solving Systems Algebraically	
	Quiz (3-1, 3-2)	
3-3	Systems of Inequalities	
3-5	Systems in Three Variables	
	Quiz (3-3, 3-5)	
3-6	Solving Systems Using Matrices	
	<b>Topic 3 Test</b> *Bonus questions from Topic 2	

**Topic 4 - Matrices** 

Textual Reference	Components	TEKS
4-1	Adding & Subtracting Matrices	
4-2	Matrix Multiplication	
	Quiz (4-1, 4-2)	
4-3	Determinants & Inverses	
4-4	Systems & Matrices	
	Quiz (4-3, 4-4)	
	<b>Topic 4 Test</b> *Bonus questions from Topics 2-3	

**Topic 5 - Quadratic Functions & Equations** 

1 opic 5 - Quadratic Functions & Equations		
Textual Reference	Components	TEKS
5-1	Attributes and Transformations of Quadratic Functions	
5-2	Standard Form of a Quadratic Function	
5-3	Modeling With Quadratic Functions	
	Quiz (5-1, 5-2, 5-3)	
5-4	Focus & Directrix of a Parabola	
5-5	Factoring Quadratic Expressions	
	Quiz (5-4, 5-5)	
	<b>Topic 5 Test Part 1</b> *Bonus questions from Topics 2-4	
5-6	Quadratic Equations	
5-7	Completing the Square	
5-8	The Quadratic Formula	
Quiz (5-6, 5-7, 5-8)		
5-9	Complex Numbers	
5-10	Quadratic Inequalities	

5-11	Systems of Linear & Quadratic Equations	
	Quiz (5-9, 5-10, 5-11)	
	Topic 5 Test Part 2 *Bonus questions from Topics 2-4	

**Topic 6 - Square Root Functions & Equations** 

<b>Textual Reference</b>	Components	TEKS
1-3	Functions Operations & Composition	
1-4	Inverse Functions	
6-2	Attributes of Square Root Functions	
6-3	Transformations of Square Root Functions	
6-1	Square Root Functions as Inverses	
	Quiz (6-1, 6-2, 6-3)	
6-4	Introduction to Square Root Equations	
6-5	Solving Square Root Equations	
	Quiz (6-4, 6-5)	
	<b>Topic 6 Test</b> *Bonus questions from Topics 2-5	

**Topic 7 - Exponential & Logarithmic Functions & Equations** 

Textual Reference	Components	TEKS
7-1	Attributes of Exponential Functions	
7-2	Transformations of Exponential Functions	
7-3	Attributes & Transformations of $f(x) = e^{x}$	
7-4	Exponential Models in Recursive Form	
Quiz (7-1, 7-2, 7-3, 7-4)		
7-5	Attributes of Logarithmic Functions	
7-7	Transformations of Logarithmic Functions	
7-8	Attributes & Transformations of the Natural Logarithm Function	
	Quiz (7-5, 7-7, 7-8)	

7-6	Properties of Logarithms	
7-9	Exponential & Logarithmic Equations	
7-10	Natural Logarithms	
Quiz (7-6, 7-9, 7-10)		
	<b>Topic 7 Test</b> *Bonus questions from Topics 2-6	

**Topic 8 - Polynomials** 

<b>Textual Reference</b>	Components	TEKS
8-1	Attributes of Polynomial Functions	
8-3	Polynomials, Linear Factors, & Zeros	
8-2	Adding, Subtracting, & Multiplying Polynomials	
	Quiz (8-1, 8-3, 8-2)	
8-4	Solving Polynomial Equations	
8-5	Dividing Polynomials	
8-6	Theorems About Roots of Polynomial Equations	
	Quiz (8-4, 8-5, 8-6)	
8-7	The Fundamental Theorem of Algebra	
	<b>Topic 8 Test</b> *Bonus questions from Topics 2-7	

**Topic 9 - Radical Expressions** 

<b>Textual Reference</b>	Components	TEKS	
9-1	Roots & Radical Expressions		
9-2	Multiplying & Dividing Radical Expressions		
	Quiz (9-1, 9-2)		
9-3	Binomial Radical Expressions		
9-4	Rational Exponents		
Quiz (9-3, 9-4)			

**Topic 9 Test**\*Bonus questions from Topics 2-8

**Topic 10 - Cubic & Cube Root Functions & Equations** 

Textual Reference	Components	TEKS
10-1	Attributes & Transformations of Cubic Functions	
10-2	Attributes of Cube Root Functions	
10-3	Transformations of Cube Root Functions	
	Quiz (10-1, 10-2, 10-3)	
10-4	Cube Root Equations	
	Quiz (10-4)	
	<b>Topic 10 Test</b> *Bonus questions from Topics 2-9	

**Topic 11 - Rational Functions & Equations** 

Topic 11 - Kational Functions & Equations			
Textual Reference	Components	TEKS	
11-1			
11-2			
11-3			
	Quiz (11-1, 11-2, 11-3)		
11-4			
11-5			
11-6			
	Quiz (11-4, 11-5, 11-6)		
	<b>Topic 11 Test</b> *Bonus questions from Topics 2-10		

Topic 12 - Data

Textual Reference	Components	TEKS
12-1	Analyzing Linear, Quadratic, & Exponential Data	
12-2	Using Regression to Choose a Model & Make Predictions	
12-3	Using Models to Make Decisions & Judgements	
	Quiz (12-1, 12-2, 12-3)	
	<b>Topic 12 Test</b> *Bonus questions from Topics 2-11	

## Sixth Grade Science - Year at a Glance

STEMscopes RES Lab Manual

#### <u>First Semester</u>

Month	STEMscopes Topic	RES Lab Manual Reference
August	Introduction to General Science	
	<u>Basic Chemistry</u> Elements and Compounds Formation of a New Substance	
September	<u>Basic Chemistry</u> Metals, Nonmetals, and Metalloids Density	Water and Gummy Bears     Household Acid and Base Items
October	Energy, Force, and Motion Potential and Kinetic Energy Energy Transformations Thermal Energy Changes in Force and Motion Incline Planes	Speed
November	Managing Energy Resources Energy Sources	1. Renewable vs Non-Renewable 2. Trash to Soil
December	<u>The Structure of the Earth</u> Layers of Earth  Tectonic Plates	Plate Tectonics

### Second Semester

Month	STEMscopes Topic	RES Lab Manual Reference
January	Rocks and Minerals Minerals Classifying Rocks	1. Minerals 2. The Rock Cycle
February	<u>Cells &amp; Kingdoms</u> Prokaryotic and Eukaryotic Cells Classification of Organisms	Bacteria
March	<u>Ecology</u> Organizations and Interactions within an Environment Predator-Prey Relationships	1. Ecology 2. Population Density
April - May	<u>Astronomy</u> Celestial Objects Gravity	Meteorites and Craters
	Space Exploration	Balloon Rockets

## Seventh Grade Science - Year at a Glance

STEMscopes RES Lab Manual

#### <u>First Semester</u>

Month	STEMscopes Topic	Topic Elements	RES Lab Manual
August	Introduction to Life Science		Plastic Sandwich Bag vs. Pencil Experiment
September	Cells	<ul> <li>Plant and Animal Cell Organelles</li> <li>Cell Theory</li> <li>Organization in Plants and Animals</li> </ul>	<ol> <li>Osmosis Lab</li> <li>Cheek Cell</li> </ol>
October	Genetics	<ul> <li>Heredity</li> <li>Reproduction</li> <li>Adaptations of Species</li> </ul>	<ol> <li>Generations of         Traits</li> <li>Environmental         Changes and         Evolution</li> <li>Natural Selection</li> <li>Predator-Prey         Adaptations</li> </ol>
November	Characteristics and Processes of Life	<ul> <li>Physical and Chemical Change</li> <li>Energy Flow Through Living Systems</li> </ul>	Food Webs
December	Weather	<ul> <li>Catastrophic Events</li> <li>Changes to Texas Land</li> </ul>	Cloud Formation

### Second Semester

Unit	STEMscopes Topic	Topic Elements	RES Lab Manual
January	Human Body Systems	<ul> <li>Systems of the Human Body</li> <li>Organism Energy Transfer</li> <li>Organism Force and Motion</li> </ul>	Nervous System and Respiration
	Animal Behavior	• External and Internal Stimuli	Crustaceans
February	Animal Characteristics and Functions	• Identification of Organisms	Three Types of Beetles
March	Plant Characteristics and Functions	<ul> <li>Photosynthesis</li> <li>Organism Force and Motion</li> <li>Identification of ORganism</li> </ul>	Xylem     Seed Germination and     Flower Model
April	Ecology	<ul><li> Ecosystems and Environments</li><li> Watershed</li></ul>	Biodiversity and Drinking Water
May	Earth, the Living Planet	<ul> <li>Characteristics of the Solar System</li> <li>Accommodations for Space Exploration</li> </ul>	Habitable Worlds

# **Eighth Grade Science - Year at a Glance**

STEMscopes RES Lab Manual

#### <u>First Semester</u>

Month	STEMscopes Topic	Topic Elements	RES Lab Manual
August	Science and the Scientific Method		Hypothesis
	Matter and Energy	• Atoms	Atoms and Molecules
September- October (to end of 1st quarter	Matter and Energy	<ul> <li>Protons and Electrons</li> <li>Periodic Table</li> <li>Chemical Formulas</li> <li>Chemical Reactions</li> </ul>	<ol> <li>Forming a         Precipitate     </li> <li>Density</li> </ol>
October (to end of 1st quarter)	Density and Bouyancy	define and calculate	
October (start of 2nd quarter)- November	Energy, Force, and Motion	<ul> <li>Unbalanced Forces</li> <li>Speed, Velocity and Acceleration</li> <li>Laws of Force and Motion</li> </ul>	<ol> <li>Calculating the         Average Speed</li> <li>Speed and         Collisions</li> <li>Balanced and         Unbalance Forces</li> <li>Mass and Free         Fall</li> </ol>
December	Earth	<ul> <li>Plate Tectonic         Theory</li> <li>Erosional Features</li> </ul>	<ol> <li>Creating         <ul> <li>Topographic</li> <li>Maps</li> </ul> </li> <li>The Sun's Effect         <ul> <li>on Earth's</li> <li>Surfaces</li> </ul> </li> <li>Plate Tectonics:         <ul> <li>Formation of</li> <li>Geological</li> <li>Features</li> </ul> </li> </ol>

#### Second Semester

Month	STEMscopes Topic	Topic Elements	RES Lab Manual
January - February	Space	<ul> <li>Components of the Universe</li> <li>The Sun</li> <li>Electromagnetic Spectrum</li> <li>Origins of the Universe</li> <li>Rotation and Revolution</li> <li>The Sun's Energy</li> <li>Lunar Cycle</li> <li>Ocean Tides</li> </ul>	Lunar Phases
	Oceanography	<ul><li>Weather Maps</li><li>Oceans and Weather</li></ul>	
March	Human Impact on the Earth	<ul><li>Environmental Changes</li><li>Human Effect on Resources</li><li>Interdependence</li></ul>	<ol> <li>Ecological         Observations</li> <li>Humans and         Pollution</li> </ol>
April	Plant Biology and Animal Biology	<ul> <li>Cells</li> <li>Kingdoms</li> <li>Reproductions</li> <li>Food Webs</li> <li>Natural Selection</li> <li>The Human Body</li> </ul>	<ol> <li>Cell Behavior</li> <li>Food Webs and Chains</li> </ol>
End of April - May	STAAR Review		
	Biology Prep for High School		

# **Biology - Year at a Glance**

## First Quarter

Unit	Торіс	Components	TEKS
<b>1</b> Week 1	Scientific Method	<ul> <li>Lab Safety</li> <li>Steps of the Scientific Method</li> <li>Experimental Design</li> </ul>	B.1A-B B.2A-F B.2H B.3B
<b>2</b> Week 2	Biochemistry	<ul> <li>Atoms, molecules, matter</li> <li>Organic compounds</li> <li>Biomolecules (lipids, carbohydrates, proteins, nucleic acid)</li> <li>Enzymes</li> </ul>	B.9A B.9C
<b>3</b> Week 3	Cells	<ul> <li>Cell theory</li> <li>Microscopes</li> <li>Common structures</li> <li>Cell Organelles</li> <li>Prokaryote vs. Eukaryote</li> <li>Plant vs. Animal Cell</li> </ul>	B.4A
<b>4</b> Weeks 4-5	Cell Transport	<ul> <li>Passive transport/ diffusion</li> <li>Cell environments</li> <li>Cell Membrane</li> <li>Cell Size</li> <li>Active transport</li> </ul>	B.4B
<b>5</b> Weeks 6-7	Cell Division	<ul><li>Mitosis</li><li>Meiosis</li><li>Cell Cycle</li><li>Cancer</li></ul>	B.5A-C B.6G
6 Weeks 8-9	DNA and Protein Synthesis	<ul> <li>Discovery</li> <li>Structure and Function</li> <li>DNA Replication</li> <li>Protein Synthesis</li> </ul>	B.6A-D

## Second Quarter

Unit	Торіс	Components	TEKS
7 Week 1	Mutations	<ul><li>Gene Mutation</li><li>Chromosomal Mutations</li><li>Genetic Disorders</li><li>Biotechnology</li></ul>	B.6E
8 Weeks 2-3	Genetics	<ul> <li>Mendelian Pattern of Inheritance</li> <li>Monohybrid and dihybrid crosses</li> <li>Non-Mendelian Patterns of Inheritance</li> <li>Codominant and Incomplete Dominant Traits</li> <li>Multiple Alleles</li> <li>Sex-linked Traits</li> </ul>	B.6F
<b>9</b> Weeks 4-5	Evolution	<ul> <li>Scientist: Darwin, Hutton, Lyell, Lamarck, Malthus</li> <li>Darwin's voyage</li> <li>Evidence of Evolution- fossil record, biogeography, homologies (anatomical, molecular, developmental)</li> <li>Evolutionary Mechanisms: genetic drift, gene flow, mutation, and recombination</li> <li>Natural Selection</li> <li>Population Genetics</li> </ul>	B.7A-F
<b>10</b> Week 6	Classification and Taxonomy	<ul> <li>Binomial Nomenclature</li> <li>Taxonomy/Levels of Classification</li> <li>Dichotomous Keys</li> <li>Cladograms and Trees</li> <li>Phylogenies</li> </ul>	B.8A-C
<b>11</b> Weeks 7-8	Microbiology and Viruses	<ul> <li>Protist -Role in health and ecosystems</li> <li>Fungi - Role in health and ecosystems</li> <li>Bacteria: Structure, Function, Reproduction, Diseases, Antibiotics</li> <li>Viruses: History of Discovery, Structure, Function, Diseases (influenza and AIDS)</li> <li>Lytic and Lysogenic Cycle</li> <li>Retrovirus</li> </ul>	B.11A B.4C
Week 9	Midterms		

### Third Quarter

Unit	Торіс	Components	TEKS
<b>12</b> Week 1	Plants	<ul><li>Structure</li><li>Function</li><li>Reproduction</li><li>Response</li></ul>	B.10(B)
<b>13</b> Weeks 2-3	Photosynthesis and Cellular Respiration	<ul> <li>Photosynthesis: light dependent reactions, Calvin Cycle</li> <li>Cellular Respiration:         Glycolysis, Krebs Cycle, electron transport chain</li> <li>Fermentation</li> <li>Compare Photosynthesis and Cellular Respiration products and reactants</li> </ul>	B.9B
<b>14</b> Week 4	Animals	• Interactions between body systems that perform the functions: regulation, nutrient absorption, reproduction, and defense from injury or illness in animals	B.10C
<b>15</b> Weeks 5-7	Body Systems	<ul> <li>Levels of Organization</li> <li>Interactions between body systems that perform the functions: regulation, nutrient absorption, reproduction, and defense from injury or illness in humans</li> </ul>	B.10A,C
<b>16</b> Weeks 8-9	Ecology	<ul> <li>Ecological Succession</li> <li>Relationships: parasitism, commensalism, mutualism, competition</li> <li>Flow of energy: food chains, food webs, ecological pyramids</li> <li>Carbon and Nitrogen Cycle</li> </ul>	B.11B B.12A-E

### Fourth Quarter

Unit	Topic	Components	TEKS
<b>17</b> Week 1	Ecology	Environmental change impact on ecosystem stability	B.12E
Week 2	EOC Prep	Category 1: Cell Structure and Function	
Week 3	EOC Prep	Category 2: Mechanisms of Genetics	
Week 4	EOC Prep	Category 3: Biological Evolution and Classification	
Week 5	EOC Prep	Category 4: Biological Processes and Systems	
Week 6	EOC Prep	Category 5: Interdependence within Environmental Systems	
Week 7	EOC		
Week 8	Special Project or Dissection	rat or fetal pig	
Week 9	Finals		

# <u>Chemistry - Year at a Glance</u>

### <u>First Quarter</u>

Unit	Торіс	Components	TEKS
<b>1</b> Weeks 1-2	General Science Introduction and Safety	<ul><li>Lab Safety</li><li>SDS Info</li><li>Scientific Method</li></ul>	C.1A-D, C.2A-D, C.2E, C.3B
<b>2</b> Weeks 3-4	Introduction to Chemistry	<ul> <li>Classification of Matter</li> <li>Chemical/Physical Properties and Changes</li> <li>Measurements and Scientific Notation</li> <li>Calculating Density</li> <li>Scientific Notation</li> <li>Significant Figures-Calculations</li> </ul>	C.2 F-G, C.4 A-D
<b>3</b> Week 5	Dimensional Analysis	<ul> <li>Introduction to         Dimensional Analysis</li> <li>More than 2 Step         Introduction to         Dimensional Analysis</li> </ul>	C.2 G
<b>4</b> Weeks 6-7	Atoms	<ul><li>History and Basics</li><li>Atomic Structure</li><li>Ions</li><li>Atomic Mass</li></ul>	C.6AC
<b>5</b> Weeks 8-9	Atomic Spectrum	<ul><li>Introduction to Light</li><li>Electrons and Energy</li><li>Quantum Mechanics</li></ul>	C.6B

### Second Quarter

Unit	Торіс	Components	TEKS
<b>6</b> Weeks 1-2	Electron Configuration	<ul> <li>Electron Configurations</li> <li>Orbital Notations</li> <li>Noble Gas Abbreviations and Valence Electrons</li> <li>Quantum Numbers</li> </ul>	C.6D
7 Weeks 3-4	Periodic Trends	<ul> <li>History of the Periodic Table</li> <li>Atomic Size Trend</li> <li>Ionization Energy Trend</li> <li>Ionic Size and Electronegativity Trends</li> </ul>	C.5A-C
<b>8</b> Weeks 5-6	Chemical Bonding	<ul> <li>Bonding Basics</li> <li>Ionic Bonding</li> <li>Covalent Bonding</li> <li>Metallic bonding</li> <li>Molecular Geometry</li> <li>VSEPR Theory</li> <li>Polarity</li> </ul>	C.7 C-E
<b>9</b> Weeks 7-8	Naming and Formula Writing	<ul> <li>Properties of Ionic and Covalent Compounds</li> <li>Assigning Oxidation Numbers</li> <li>Naming and Formula Writing for Ionic Compounds</li> <li>Naming Acids</li> <li>Naming and Formula Writing for Covalent Compounds</li> </ul>	C.7A-B
Week 9	Midterms		

### Third Quarter

Unit	Торіс	Components	TEKS
<b>10</b> Weeks 1-2.5	The Mole	<ul> <li>History</li> <li>Particle Conversions</li> <li>Molar Mass (1-step conversions)</li> <li>Molar Mass (2-step conversions)</li> <li>Volume Conversions (and 3-step conversions)</li> <li>Percent Composition</li> <li>Empirical Formulas</li> <li>Molecular Formulas</li> </ul>	C.8A-D
<b>11</b> Weeks 2.5-5	Chemical Reaction	<ul> <li>Word Equations and Formula Equations</li> <li>Balancing Chemical Equations</li> <li>Synthesis and Decomposition Reactions</li> <li>Single Replacement Reactions</li> <li>Double Replacement Reactions</li> <li>Activity Series</li> </ul>	C.8E-F
<b>12</b> Weeks 6-7	Stoichiometry	<ul> <li>Mole-Mole Calculations</li> <li>Mass-Mass Calculations</li> <li>Volume and Particles         <ul> <li>Calculations</li> </ul> </li> <li>Limiting Reactants</li> <li>Excess Reactants</li> <li>Percent Yield</li> </ul>	C.8 G-H
<b>13</b> Weeks 8-9	Thermochemistry	<ul> <li>Introduction to         Thermochemistry</li> <li>Calorimetry</li> <li>Thermochemical         Equations</li> <li>Limiting Reactants with         Thermochemical         Equations</li> <li>Heating Curves</li> <li>Hess' Law</li> </ul>	C11.A-D

# Fourth Quarter

Unit	Торіс	Components	TEKS
<b>14</b> Weeks 1-2	Kinetic Molecular Theory	<ul> <li>Kinetic Molecular Theory: Gases</li> <li>Kinetic Molecular Theory: Liquids</li> <li>Kinetic Molecular Theory: Solids</li> <li>Phase Diagrams</li> </ul>	C.9B, C.4C
<b>15</b> Weeks 3-4	Gas Laws	<ul> <li>Introduction to Gas Laws</li> <li>Boyle's and Charles' Gas Laws</li> <li>Gay-Lussac's and Combined Gas Laws</li> <li>Ideal Gas Law</li> <li>Dalton's and Graham's Gas Laws</li> <li>Real vs. Ideal Gas Laws</li> </ul>	C.9A-B
<b>16</b> Weeks 5-6	Solutions, Acids, and Bases	<ul> <li>Introduction to Solutions</li> <li>Molarity</li> <li>Acids and Bases (Properties)</li> <li>Acid-Base Calculations</li> <li>Titrations</li> </ul>	С.10А-Н
<b>17</b> Week 7	Nuclear	<ul> <li>Types of Radiation</li> <li>Half-Life</li> <li>Transmutation</li> <li>Fission and Fusion</li> <li>Application</li> </ul>	C.12A-B
Weeks 8-9	Review & Finals		

# **Physics - Year at a Glance**

#### <u>First Semester</u>

Unit	Торіс	Components	TEKS
1	Inro and Motion Graph	<ul><li>Introduction to Physics</li><li>Measurements</li><li>Interpreting Motion Graphs</li></ul>	P.1A-B, P.2A-J, P.3C, P.4A
2	One-Dimensional Motion		P.4B
3	Gravitational Forces	<ul> <li>Forces: Gravitational, Electromagnetic, Weak and Strong nuclear</li> <li>Calculate the Magnitude of Gravitational Force</li> </ul>	P.5A-B
4	Force and Laws of Motion	<ul><li>Force on objects</li><li>Law of inertia</li><li>Free-body force diagram</li></ul>	P.4D
5	Two-Dimensional Motion	<ul> <li>Two-Dimensional Motion and Vectors</li> <li>Vector Operators</li> <li>Projectile and Circular Motion</li> </ul>	P.4C
6	Mechanical Energy, Momentum, and Impulse	<ul><li>Power</li><li>Momentum and Impulse</li></ul>	P.6C
7	Work-Energy Theorem and Energy Transformation	<ul> <li>Work-Energy Theorem</li> <li>Kinetic and Potential Energy and their Transformations</li> </ul>	P.6A-B
8	Conservation of Energy and Momentum	<ul> <li>Conversation of Energy</li> <li>Conservation of Momentum in One Dimension</li> </ul>	P.6D

### Second Semester

Unit	Topic	Components	TEKS
1	Thermodynamics and Thermal Energy Transfer	<ul> <li>4 Laws of Thermodynamics</li> <li>Thermal Energy Transfer</li> </ul>	P.6E
2	Wave Propagation and Characteristics	<ul><li>Oscillatory Motion</li><li>Wave Propagation</li><li>Characteristics of Waves</li></ul>	P.7A-B
3	Characteristics and Behaviors of Sound Wave	<ul> <li>Behaviors of Transverse         Waves: Electromagnetic,         Electromagnetic Spectrum,         Longitudinal, and Sound         Waves</li> <li>Behaviors of Waves:         Reflection, Refraction,         Diffraction, Inference,         Resonance, Doppler Effect</li> </ul>	P.7C-D
4	Electromagnetic Waves and Image Formation	Image Formation of Reflection and Refraction	P.7C-E
5	Electric and Magnetic Forces	<ul> <li>Magnitude of Forces</li> <li>Electric and Magnetic         Forces: Generators and             Transformers     </li> </ul>	P.5C-D
6	Electric Circuits	<ul> <li>Conductors' and Insulators'         Electric Properties</li> <li>Calculating Current through,         potential difference,         resistance of, and power         used by Electric Currents         (Series and Parallel         Combinations)</li> </ul>	P.5E-F
7	Photoelectric Effect and Atomic Physics	<ul> <li>Photoelectric Effect and Dual Nature of Light</li> <li>Compare/Explain Emission Spectra Produced by Various Atoms</li> </ul>	P.8A-C

		• Calculate and Describe the Application of Mass-Energy Equivalence	
8	Applications of Atomic and Nuclear Physics	• Applications of Atomic and Nuclear Phenomena:	P.8D
9	STEM Project/Individual Project	• Students Perform Investigation	PHYS.1A-1B PHYS.2A-2J PHYS.3A-3D

# <u>Astronomy - Year at a Glance</u>

### First Quarter

Unit	Торіс	Components	TEKS
1 Weeks 1-2	Nature and History of Astronomy	<ul> <li>Use of astronomy in ancient civilizations: Egyptians, Mayans, Aztecs, Europeans, Native Americans</li> <li>Contributions of scientists: Ptolemy, Copernicus, Tycho Brahe, Kepler, Galileo, Newton, Einstein, Hubble, Maria Mitchell, Henrietta Swan Leavitt</li> <li>Role of constellations in ancient and modern navigation; origin of perceived constellation patterns</li> <li>Contributions of modern astronomy to today's society: identification of potential asteroid/comet impact hazards &amp; the Sun's effects on communication, navigation, and high-tech devices</li> </ul>	2A-H, 3A-D, 4A-D, 6E
<b>2</b> Weeks 3-4	Solar System	<ul> <li>Scale, size, and distance of the Sun, Earth, and Moon system</li> <li>Scale, size, and distance of objects in the solar system such as the Sun and planets</li> <li>Relate apparent versus absolute magnitude to the distances of celestial objects</li> <li>Units of measurement in astronomy, including Astronomical Units and light years</li> </ul>	2-A,B, C 3-A 6-A,B,D, E 9-A,B,C
<b>3</b> Weeks 5-6	Planets: Non-Inhabited	<ul> <li>Compare essential factors to life on Earth such as temperature, water, mass, and gases to conditions on other planets</li> <li>Compare the planets in terms of orbit, size, composition, rotation,</li> </ul>	6-B,D,E 9-A,B,C,E

		<ul> <li>atmosphere, natural satellites, and geological activity</li> <li>Relate role of Newton's law of universal gravitation to the motion of the planets around the Sun and to the motion of natural and artificial satellites around the planets</li> <li>Demonstrate use of units of measurement in astronomy, including Astronomical Units and light years</li> </ul>	
<b>4</b> Weeks 7-9	Earth and Moon	<ul> <li>Lunar phases</li> <li>Lunar and solar eclipses</li> <li>Identify the effects of the Moon on tides</li> <li>Seasons- relationship of the seasons to equinoxes, solstices, the tropics, and the equator</li> <li>Length of day and night throughout the year</li> <li>concentration of solar energy received on Earth at a particular location</li> </ul>	5-A,B 6-A,B,D, E 7-A,B,C, D 8-A,B,C, D 9-A,B,C

# Second Quarter

Unit	Торіс	Components	TEKS
<b>6</b> Weeks 1-2.5	The Sun	<ul> <li>Approximate mass, size, motion, temperature, structure, and composition of the Sun</li> <li>Nuclear fusion and nuclear fission</li> <li>Eleven-year solar cycle and the significance of sunspots</li> <li>Solar magnetic storm activity, including coronal mass ejections, prominences, flares, and sunspots.</li> </ul>	5A 6-A,B 7-A,B,C 8-C 9-A 10-A,B,C,D
7 Weeks 2.5-5	The Tools of Astronomy	<ul> <li>Use of spectroscopy in obtaining physical data on celestial objects such as temperature, chemical composition, and relative motion</li> <li>Hertzsprung-Russell diagram to plot and examine the life cycle of stars from birth to death</li> </ul>	11-F,G 13-A 14-A,B,C,D
<b>8</b> Weeks 6-9	The Stars and their Formation	<ul> <li>Characteristics of main sequence stars, including surface temperature, age, relative size, and composition</li> <li>Characterize star formation in stellar nurseries from giant molecular clouds, to protostars, to the development of main sequence stars</li> <li>Use of spectroscopy in obtaining physical data on celestial objects such as temperature, chemical composition, and relative motion</li> </ul>	11-A,B,C,D, E,F,G

# Third Quarter

Unit	Торіс	Components	TEKS
10 Weeks 1-3	Stellar Evolution and Explosions	<ul> <li>Evaluate the relationship between mass and fusion on the dying process and properties of stars</li> <li>Compare how the mass and gravity of a main sequence star will determine its end state as a white dwarf, neutron star, or black hole.</li> </ul>	11-A,B,C,D,E ,F,G
<b>11</b> Weeks 4-5	Neutron Stars and Black Holes	Differentiate among the end states of stars, including white dwarfs, neutron stars, and black holes	11-A,B,C,D,E ,F,G
<b>12</b> Weeks 6-7	Interstellar Mediums		11-A,B,C,D,E ,F,G
<b>13</b> Weeks 8-9	Galaxies	<ul> <li>Characteristics of galaxies</li> <li>Different types of galaxies, including spiral, elliptical, irregular, and dwarf</li> </ul>	6-C 12-A,B,C

### Fourth Quarter

Unit	Торіс	Components	TEKS
<b>14</b> Weeks 1-2	Galaxies and Dark Matter	Scientific hypotheses of the fate of the universe, including open and closed universes and the role of dark matter and dark energy	6-C 12-A,B,C 13-C
<b>15</b> Weeks 3-4	The Milky Way Galaxy	<ul> <li>Scale, size, and distance of the stars, Milky Way, and other galaxies</li> <li>Type, structure, and components of our Milky Way galaxy and location of our solar system</li> </ul>	6-C 12-A,B,C
<b>16</b> Weeks 5-7	Cosmology	<ul> <li>Historical development of the Big Bang Theory, including red shift, cosmic microwave background radiation, and other supporting evidence</li> <li>Current theories of the evolution of the universe</li> <li>Scientific hypotheses of the fate of the universe, including open and closed universes and the role of dark matter and dark energy</li> </ul>	13-A,B,C
<b>17</b> Weeks 8-9	The Early Universe and Life Today	<ul> <li>Contributions of human space flight and future plans and challenges</li> <li>Robotic space flight</li> </ul>	14-A,B,C,D, E

of astronomical data across the electromagnetic spectrum  • New developments and discoveries in astronomy
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