

Coldiron Curriculum, Grades 2-3

Overall goals: Setting priorities, maintaining focus

Language Arts	Goals	Specifics	Resources
Reading	Smooth, consistent reading with feeling and comprehension	<ul style="list-style-type: none"> Syllabication (vc/cv, v/cv, vc/v) Abbreviations Identify plot, characters, setting 	
	Well-rounded reading base	<ul style="list-style-type: none"> Fiction Non-fiction Biography Poetry Myths/fables Mysteries Fantasy Content (science, history, math, etc.) 	
	Extraction of a wide variety of information from readings		<ul style="list-style-type: none"> <i>Five in a Row</i> series
Handwriting	Consistently neat manuscript		<ul style="list-style-type: none"> Copywork Dictation
	Ability to read and write cursive		
Writing/Composition	Ability to clearly communicate in various formats (letters, stories, summary reports)	<ul style="list-style-type: none"> Informal letters Descriptive paragraphs Summaries: short stories and factual reports Poetry Note-taking 	<ul style="list-style-type: none"> <i>Writing in Narrative: The Seven Sentence Story, A Simplified Introduction to Story Writing</i> <i>Write With the Best</i> (partial)
Grammar	Consistent use of appropriate punctuation and capitalization		<ul style="list-style-type: none"> <i>Editor-in-Chief</i> <i>Write With the Best</i> Dictation
	Use appropriate parts of speech, verb tenses, etc.	<ul style="list-style-type: none"> Adverbs Pronouns Types of verbs, tenses 	<ul style="list-style-type: none"> <i>Editor-in-Chief</i> <i>Write With the Best</i>
Spelling		<ul style="list-style-type: none"> Common prefixes, suffixes Phonics-based review Homonyms and homographs Latin and Greek roots 	<ul style="list-style-type: none"> <i>AlphaPhonics</i> Spelling bees Word games and puzzles Copywork, dictation <i>The Dove Dove</i> <i>Rummy Roots</i> <i>AVKO Sequential Spelling</i>
Oral communication / presentation	Comfort in front of a group or one-on-one, both in practiced and extemporaneous speaking	<p>Posture, eye contact, etc.</p> <p>Organization of thoughts and notes</p> <p>Comfort, humor, goals</p> <p>Memorization, storytelling, summary, etc.</p>	

Vocabulary	Use wide range of words and phrases to communicate clearly and precisely	<ul style="list-style-type: none"> • Synonyms • Antonyms • Homonyms • Latin and Greek roots • Figures of speech (similes, metaphors, onomatopoeia, alliteration, hyperbole, personification, idioms) 	<ul style="list-style-type: none"> • Thesaurus • Dictionary • <i>Rummy Roots</i> • <i>Blurt!</i> • <i>It Figures! Fun Figures of Speech</i> • <i>Mad as a Wet Hen! and Other Funny Idioms</i>
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Math / Logic / Reasoning

General resources			<ul style="list-style-type: none"> • Singapore Primary Math 2A-3B
Basic operations	<p>Know when to use which operations</p> <p>Master +/- facts through 10+10 with speed and accuracy</p> <p>Be familiar with multiplication and division</p> <p>Add to thousands, with and without re-grouping, using multiple addends</p> <p>Subtract to thousands, with and without re-grouping</p> <p>Use correct place value notation (commas)</p>	<ul style="list-style-type: none"> • When to apply • How to notate • How to figure • Horizontal/mental • Vertical/paper • Estimation • Horizontal/mental • Vertical/paper • Estimation 	<ul style="list-style-type: none"> • Word problems • Everyday situations • <i>Quarter Mile Math</i> drills • <i>Math-It</i> • Math games and drills
Measurement	Know when and how to measure and estimate measurement in various circumstances, using metric and U.S. measures	<ul style="list-style-type: none"> • Time (second – century) • Temperature, including boiling and freezing points • Length (length, width, depth, perimeter, diameter...) • Capacity/volume • Weight 	
Logic / Sets	Explore sets and logical groupings	<ul style="list-style-type: none"> • Venn diagrams 	<ul style="list-style-type: none"> • <i>Set game</i> • <i>Venn Perplexors</i>
Geometry	Understand basic geometry	<ul style="list-style-type: none"> • Review of common shapes (2D and 3D) • Length, width, depth, perimeter • Area and volume • Angles, right angles, sides • Symmetry 	
Money	Use money comfortably	<ul style="list-style-type: none"> • Add • Subtract (make change) • Decimal concept/notation • 	
Fractions	Compare fractions	<ul style="list-style-type: none"> • Equivalencies • Comparing (</>) 	

Science	Goals	Specifics	Resources
General	Reinforce importance of scientific method, classification		<ul style="list-style-type: none"> • <i>Nebel's Elementary Education</i> • <i>Kingfisher Science Encyclopedia</i>
	Examine scientific ideas and scientists as encountered in literature, history, and everyday life	<ul style="list-style-type: none"> • Examine science and scientists in history studies • Pets / livestock • Gardening • Nature studies 	<ul style="list-style-type: none"> • Scientist biographies
Life science	Review plant and animal kingdoms, human body, etc.		
Physics	Understand what energy is and does (N 349-354)	<ul style="list-style-type: none"> • Matter vs. energy • Potential / kinetic • Heat, light, electrical, motion 	
	Heat – What it is and does	<ul style="list-style-type: none"> • Sources • Movement: conduction, convection, radiation (N 341-343) 	
	Light – What it is and does (N 379+)	<ul style="list-style-type: none"> • Color spectrum, plus black, white, gray • Tools: Mirrors, lenses, prisms (N 388-390) • Effects: transparency, translucence, opacity • Actions: reflection, refraction, absorption (N 341-342) • Light-to-heat (N 386) • Bending light (N 390-392) <p>Scientists: Huygens, van Leeuwenhoek</p>	
	Electricity – What it is and does (N354)	<ul style="list-style-type: none"> • Magnetism (poles, compass, attract/repel) • Simple circuits • Volts, amps, resistance • Static electricity (N 361) • Short circuits, sparks, shocks (N 359-360) <p>Scientists: Franklin, Ampere</p>	<ul style="list-style-type: none"> • <i>What Makes a Magnet?</i>, Branley
	Motion / Force – What it is and does (N325)	<ul style="list-style-type: none"> • Momentum (N313-319) • Centrifugal force • Friction (N308) • Gravity (see below) • Simple machines (lever, wedge, screw, ramp, wheel, gears, pulley, siphon) N 331-333, 305, 340 <p>Scientists: Archimedes, Galileo</p>	

	Sound	<ul style="list-style-type: none"> • Vibration / pitch 	<ul style="list-style-type: none"> • <i>Science Book of Sound, Andley</i> • <i>Sounds All Around, Pfeffer</i>
	Understand gravity (N 301-302)	<ul style="list-style-type: none"> • Horizontal / vertical relative to gravitational pull • Effect on falling objects (N 302) • Uses of (N 305-306) • Overcoming (N 303) • Center of gravity (N 308-312) 	
		Scientists: Newton	
Chemistry	Understand basics about working with matter	<ul style="list-style-type: none"> • Matter vs. energy (N 226) • States: Solid / liquid / gas • Solutions, mixtures, insoluble particles (N 220, 235) • Particles (N 223-224) • Pressure / vacuum (N225) • Molecules, atoms (N 226) • Chemical reactions (N 227) • Basic materials 	
Earth sciences (Geology, hydrology, meteorology)	Understand the water cycle (N 271-281), including weather		
	Review seasons	<ul style="list-style-type: none"> • Earth's axis, rotation, poles, revolution <ul style="list-style-type: none"> ◦ Sunrise/sunset: direction (N111) ◦ Position of sun: time (N118) ◦ Seasons, equinox (N121) • Moon phases (N123) 	
	Review earth's composition	<ul style="list-style-type: none"> • Crust, mantle, outer core, inner core 	<ul style="list-style-type: none"> • <i>How to Dig a Hole to the Other Side of the Earth, McNulty</i>
	Compare and understand features of earth's geology	<ul style="list-style-type: none"> • Tectonic plates, mountains, volcanoes • Rocks (igneous, sedimentary, metamorphic, limestone/marble) N227-229 • Rocks compared to minerals, fossils (N 228-229) 	
Astronomy	Become familiar with our solar system	<ul style="list-style-type: none"> • Solar system overview • Stars / sun (heat, light, constellations) • Planets (orbit, rotation, revolution) • Asteroids, comets • Eclipses (solar, lunar) 	

Place our solar system in context (brief overview)

- Galaxies
- The universe

- *The Universe*, Simon

Learn the history and status of space exploration

- Telescopes
- Satellites
- Rockets
- Space shuttle
- Space station

Scientists / explorers:

- Copernicus
- Galileo
- Sir Isaac Newton
- Robert Goddard
- Yuri Gagarin
- Neil Armstrong

History / Geography	Goals	Specifics	Resources
History	Gain broad understanding of time spans and world history	Continue world history readings and study from ancient through modern times	<ul style="list-style-type: none"> • <i>A Little History of the World</i> • <i>A Child's History of the World</i> • <i>Story of the World</i> • <i>Learning Through History</i> magazine • Teaching Company lectures • Books, biographies, historical fiction
Geography	Understand and use maps, globes	<ul style="list-style-type: none"> • Interpret common symbols (compass, rivers, landforms, capitals, distance scale) • Locate key historical and other places on maps, globes • Latitude, longitude 	<ul style="list-style-type: none"> • Atlas • Globe • Map
Citizenship	Goals	Specifics	Resources
	Use respect as basis for individual and societal functions	<ul style="list-style-type: none"> • Respect -> Manners -> Authority / Law -> Government • Respect for God, nature, self, people, authority, property 	<ul style="list-style-type: none"> • Manners, etiquette books • Family rules, chores, cooperation • Regular contemplation of nature's inter-working
	Understand basic roles and levels of government, key authority figures and locations	<ul style="list-style-type: none"> • City (council, mayor) • County (commissioner) • State (governor, legislature) • Federal (president, legislature, courts) • Court systems • Other types in the world 	
	Understand basic American governmental history and symbols	<ul style="list-style-type: none"> • Holidays / history • Flag • Songs and poems 	<ul style="list-style-type: none"> • <i>Star-Spangled Banner</i> • <i>America, the Beautiful</i> • <i>Pledge of Allegiance</i> • White House • Statue of Liberty

- Various monuments

Miscellaneous	Goals	Specifics	Resources
Reference	Know when and how to use common reference materials	<ul style="list-style-type: none"> • Table of Contents, index, glossary • Library • Skim and scan techniques 	<ul style="list-style-type: none"> • Thesaurus • Dictionary • Encyclopedia • Atlas • Phone book
Memorization	Retain short passages from memory	<ul style="list-style-type: none"> • Poetry • Literary passages 	
Critical thinking / Logic	Analyze actions, motivations Practice if/then thinking		<ul style="list-style-type: none"> • <i>True Lies</i> type books • <i>Logic Links</i> game
Physical education / Health	Improve: <ul style="list-style-type: none"> • Endurance • Strength • Aiming/throwing • Catching • Kicking/rolling • Coordination 	<ul style="list-style-type: none"> • Fall: Hiking, running, kickball, jump rope, obstacle courses, etc. • Winter: Gymnastics? • Spring: Softball? • Summer: Swimming lessons 	
Art	Learn about styles, mediums, artists, basic techniques	<ul style="list-style-type: none"> • Wide exposure • Artists / history • Hands-on instruction in techniques 	<ul style="list-style-type: none"> • <i>I Can Do All Things</i> • Museums • Biographies
Music		<ul style="list-style-type: none"> • Wide exposure • Artists / history • Instruction (beat, rhythm, high/low, introductory piano) 	<ul style="list-style-type: none"> • <i>The Story of the Orchestra</i> and other books • Biographies
Typing		<ul style="list-style-type: none"> • 10-key • QWERTY keyboard 	<ul style="list-style-type: none"> • <i>Quarter Mile Math</i> • Chart/exercises
Foreign language		<ul style="list-style-type: none"> • Spanish • Greek/Latin roots 	<ul style="list-style-type: none"> • <i>Rosetta Stone</i> • <i>Rummy Roots</i>
Life skills		<ul style="list-style-type: none"> • Basic sewing (hand, introductory machine) • Cooking/nutrition • Gardening • Caring for pets and livestock 	