

K-8 COURSES

2011–2012 School Year





K–8: NURTURING INQUISITIVE MINDS

Based on decades of education research, the K¹² curriculum offers a rich mix of content, including interactive lessons, elaborate textbooks, and lots of hands-on materials. This combination of online and offline content—of thinking and doing—helps engage young minds in the right ways.

The K¹² curriculum nurtures inquisitive minds with the simple approach that Big Ideas + Consecutive Down Payments + Practice = Content Mastery. This means that every lesson builds on prior learning, and students shouldn't move on to new material until they demonstrate "mastery" over the old. The curriculum itself is built around the notion of identifying the "big ideas" within a subject, then reinforcing that material through repetition and assessment.

The K¹² curriculum for grades K–8 includes courses in seven subjects—language arts/English, history, math, science, music, art, and world languages—plus **adaptive** K–5 math courses and **MARK¹²** adaptive reading remediation courses. With more than 700 engaging lessons in each subject, students can dive deeply into problem areas or areas of interest. With this in-depth curriculum, combined with the individualized K¹² approach, children will find the pace and learning style that works best for them.

Online Courses Designed for Online Delivery

With more than 2.5 million courses delivered to date, K¹² serves more online courses than any other K–12 curriculum provider—and it's in large part because K¹² sets the highest standards of course quality.

K¹² never just scans a textbook and calls it an online course. K¹² courses are designed and developed for online delivery from the outset. The K¹² team of curriculum experts and course designers start from scratch, thoroughly scoping out the learning objectives for each course. They map out a strategy for how to best accomplish those objectives using online text, graphics, charts, illustrations, interactive demonstrations, offline reading materials or activities, and interactive online sessions. Then, usability testing is conducted to make sure students can easily navigate through the lessons and master the intended learning objectives.

K¹² knows that the combination of rich, engaging content with interesting, interactive demonstrations and activities helps students absorb and retain information. The use of assessments further allows students to demonstrate mastery of progress toward learning objectives.

Adaptive Learning Technology in Reading and Math

MARK¹² Reading (Adaptive Remediation): Mastery. Acceleration. Remediation. **K¹². MARK¹²** Reading is a three-stage adaptive course for students in grades 3–5 who are reading two or more grades below grade level. The course gives students the opportunity to master missed concepts in a way that accelerates them through the remediation process. Students work independently and with their Learning Coach to develop oral reading, comprehension, phonics, spelling, and fluency skills. They also practice grammar, usage, mechanics, and composition. The engaging course features compelling graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to help guide their students toward success.

Math⁺ for Grades K–5: These exciting, research-based adaptive courses focus on computational fluency, conceptual understanding, and problem solving. The engaging approach features colorful graphics and animation, learning tools, and games; **adaptive** activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success.

New for 2011! Enhancements to the learning experience this year include games—**xGerm**s Computational Fluency and **Spell-n-Stack**—and **mobile applications** for the iPhone and iPod Touch, available through iTunes. Now, anytime, anywhere, students can use the mobile apps to practice working with money and calculate their reading pace in words per minute.

K–8 COURSE LIST

Course listings may vary per school.

A =adaptive learning technology

N =new and improved content

English/Language Arts

Kindergarten Language Arts
 First Grade Language Arts
 Second Grade Language Arts
 Third Grade Language Arts
 Fourth Grade Language Arts
 Fifth Grade Language Arts
 Intermediate English A
 Intermediate English B
 Literary Analysis and Composition
 MARK¹² Reading I (Remediation) **A**
 MARK¹² Reading II (Remediation) **A**
 MARK¹² Reading III (Remediation) **A**

Math

Math⁺ K (Blue) **A**
 Math⁺ 1 (Green) **A**
 Math⁺ 2 (Orange) **A**
 Math⁺ 3 (Purple) **A**
 Math⁺ 4 (Red) **A**
 Math⁺ 5 (Yellow) **A**
 Fundamentals of Geometry and Algebra **N**
 Pre-Algebra
 Algebra

Science

Science K
 Science 1
 Science 2
 Science 3
 Science 4
 Science 5
 Earth Science
 Life Science
 Physical Science
 Advanced Earth Science
 Advanced Life Science
 Advanced Physical Science

History

History K
 History 1 **N**
 History 2 **N**
 History 3 **N**
 History 4 **N**
 American History Before 1865
 American History Since 1865
 Intermediate World History A
 Intermediate World History B

World Languages

Elementary Spanish 1
 Elementary Spanish 2
 Elementary French 1
 Elementary French 2
 Elementary German 1
 Elementary German 2
 Elementary Latin 1
 Middle School Spanish 1
 Middle School Spanish 2
 Middle School French 1
 Middle School French 2
 Middle School German 1
 Middle School German 2
 Middle School Latin 1
 Middle School Latin 2
 Middle School Chinese 1
 Middle School Chinese 2

Art

Art K
 Art 1
 Art 2
 Art 3
 Art 4
 Intermediate Art: American A
 Intermediate Art: American B
 Intermediate Art: World A
 Intermediate Art: World B

Music

Preparatory Music
 Beginning 1 Music
 Beginning 2 Music
 Introduction to Music
 Intermediate 1 Music
 Intermediate 2 Music
 Intermediate 3 Music
 Exploring Music
 Music Concepts A
 Music Concepts B
 Music Appreciation

Orientation

Introduction to Online Learning Grades K–2
 Introduction to Online Learning Grades 3–5
 Introduction to Online Learning Grades 6–8



Kindergarten Language Arts

PhonicsWorks™ prepares students to become independent readers through systematic, multisensory instruction in phonemic awareness and letter/sound knowledge, complemented by read-aloud literature that kindles the imagination while building comprehension and vocabulary.

Curriculum Items

- Beginning Phonics flash cards
- Slate chalkboard
- Printed alphabet desk strips
- Wide double-lined paper
- PhonicsWorks™ Instructional Video™
- PhonicsWorks™ Readers, Vols. 1–9
- PhonicsWorks™ Basic Tile Kit
- PhonicsWorks™ Student Guide – Semesters 1 & 2
- PhonicsWorks™ Teacher Guide – Semesters 1 & 2
- Beginning Phonics Flash cards
- *Handwriting Without Tears: Letters and Numbers for Me*
- Junior Great Books, Dragon Series, Vols. 1–3
- Junior Great Books, Sailing Ship Series, Vols. 1–3
- *The Random House Book of Fairy Tales*, adapted by Amy Ehrlich
- *Rhyme Time* by Tomie dePaola
- *The Rooster Crows—A Book of American Rhymes and Jingles* by Maud and Miska Petersham
- *A Chair for My Mother* by Vera Williams
- *A Story* by Gail Haley
- *Caps for Sale* by Esphyr Slobodkina
- *Make Way for Ducklings* by Robert McCloskey
- *Mike Mulligan and His Steam Shovel* by Virginia Lee Burton
- *Millions of Cats* by Wanda Gag
- *The Complete Adventures of Peter Rabbit* by Beatrix Potter, or these separate titles: *The Tale of Peter Rabbit*, *The Tale of Benjamin Bunny*, and *The Tale of the Flopsy Bunnies*
- *The Ox-Cart Man* by Donald Hall
- *The Runaway Bunny* by Margaret Wise Brown
- *The Snowy Day* by Ezra Jack Keats
- *The Velveteen Rabbit* by Margery Williams
- *Tikki Tikki Tembo* by Arlene Mosel
- *Tom Thumb* by Richard Jesse Watson

First Grade Language Arts

The advanced PhonicsWorks™ program builds decoding skills and helps students become confident, independent readers and spellers. *Handwriting Without Tears* focuses on careful practice at a pace that matches students' development of fine motor skills.

Curriculum Items

- PhonicsWorks™ Readers, Vols. 10–20
- PhonicsWorks™ Readers, Vols. 21–30
- PhonicsWorks™ Video
- PhonicsWorks™ Basic Tile Kit
- PhonicsWorks™ Advanced Tile Kit
- PhonicsWorks™ Student Guide – Semesters 1 & 2
- PhonicsWorks™ Teacher Guide – Semesters 1 & 2
- Beginning Phonics Flash cards
- Advanced Phonics Flash cards
- *Handwriting Without Tears: My Printing Book*
- Printing Teacher's Guide
- Printed alphabet desk strips
- Wide double-lined paper
- Slate chalkboard
- EPS Primary Analogies, Book 1
- Junior Great Books, Sun Series, Vols. 1–3
- Junior Great Books, Pegasus Series, Vols. 1–3
- Listen My Children: Poems for First Grade
- Classics for Young Readers, Vol. 1
- *Ready ... Set ... Read! The Beginning Reader's Treasury*, compiled by Joanna Cole and Stephanie Calmenson
- *Weather*, a book of poems selected by Lee Bennett Hopkins
- *A Picture for Harold's Room* by Crockett Johnson
- *Amelia Bedelia* by Peggy Parish
- *And I Mean It, Stanley* by Crosby Bonsall
- *Bedtime for Frances* by Russell Hoban
- *Danny and the Dinosaur* by Syd Hoff
- *Frog and Toad Are Friends* by Arnold Lobel
- *Harry and the Lady Next Door* by Gene Zion
- *Little Bear* by Else Holmelund Minarik
- *Mrs. Piggle-Wiggle* by Betty MacDonald
- *No Fighting, No Biting* by Else Holmelund Minarik
- *Owl at Home* by Arnold Lobel
- *Sylvester and the Magic Pebble* by William Steig
- *Tales of Amanda Pig* by Jean Van Leeuwen
- *The First Thanksgiving* by Linda Hayward
- *The Legend of the Bluebonnet* by Tomie dePaola
- *Who Will Be My Friends?* by Syd Hoff
- *Winnie-the-Pooh* by A. A. Milne

Second Grade Language Arts

Students practice composition; grammar, usage, and mechanics; vocabulary; primary analogies; handwriting; public speaking; and spelling.

Guided reading lessons offer new challenges: greater length, more complex content, and new vocabulary. The emphasis is on classic literature that embodies exemplary virtues, including Aesop's fables, "The Steadfast Tin Soldier," and "The Pied Piper of Hamelin." Readings also include nonfiction works.

Curriculum Items

- Printing Teacher's Guide
- *Handwriting Without Tears: Cursive Handwriting*
- *Handwriting Without Tears: Printing Power*
- White dry-erase board
- Regular double-lined paper
- Cursive alphabet desk strips
- Printed alphabet desk strips
- EPS Primary Analogies, Book 2
- EPS Reading Comprehension, Book A
- EPS Wordly Wise 3000, Book A
- *K¹² Classics for Young Readers*, Vol. 2
- *Listen My Children: Poems for 2nd Graders* (Core Knowledge Foundation)
- *Surprises*, a book of poems selected by Lee Bennett Hopkins
- *A Weed Is a Flower* by Alikei
- *Buddy: the First Seeing Eye Dog* by Eva Moore
- *Chang's Paper Pony* by Eleanor Coerr
- *Clara and the Bookwagon* by Nancy Levinson
- *Crow Boy* by Taro Yashima
- *George the Drummer Boy* by Nathaniel Benchley
- *Knights of the Round Table* ("Bullseye Step into Classics" edition) by Gwen Gross
- *Long Way to a New Land* by Joan Sandin
- *Peter Pan* ("Bullseye Step into Classics" edition) by J.M. Barrie, retold by Cathy East Dubowski
- *Robin Hood* ("Bullseye Step into Classics" edition) by Annie Ingle
- *Sam, Bang & Moonshine* by Evaline Ness
- *Sam the Minuteman* by Nathaniel Benchley
- *The Bears on Hemlock Mountain* by Alice Dalgliesh
- *The Josefina Story Quilt* by Eleanor Coerr
- *The Long Way Westward* by Joan Sandin
- *Tye May and the Magic Brush* by Molly Garrett Bang
- *Wagon Wheels* by Barbara Brenner

Third Grade Language Arts

Students practice composition; grammar, usage, and mechanics; vocabulary; primary analogies; handwriting; public speaking; and spelling.

Students develop literary analysis and comprehension skills. The emphasis is on works that embody exemplary virtues, including Greek and Norse myths, "William Tell," and episodes from *Black Beauty*. Students read works of nonfiction, as well as four novels (selected from a long list of such classics as *Charlotte's Web*, *Little House on the Prairie*, and *Henry Huggins*). A test preparation program prepares students for standardized tests.

Curriculum Items

- Cursive Teacher's Guide
- White dry-erase board
- Classics for Young Readers, Vol. 3A
- Classics for Young Readers, Vol. 3B
- *The Glory of Greece* by Beth Zemble and John Holdren
- *George Washington—Soldier, Hero, President* by Justine and Ron Fontes
- *The Declaration of Independence* by Patricia Ryon Quiri
- Cursive Handwriting
- Cursive Success
- *Exercises in English*, Level C
- Primary Analogies, Book 3
- Wordly Wise 3000, Book B
- Writing in Action, Vol. A
- Writing in Action, Vol. B
- *Test Ready Plus: Reading*
- *Test Ready: Reading Longer Passages*
- *Test Ready Plus: Language Arts*, Book 3

Fourth Grade Language Arts

Students practice composition; learn about spelling, grammar, usage, and mechanics; and enrich their vocabulary skills.

Students learn to identify and analyze literary elements such as character, plot, theme, and setting. The emphasis is on classic literature and folktales from many lands. Students read works of nonfiction, as well as four novels (selected from a long list of such classics as *The Cricket in Times Square*, *My Side of the Mountain*, and *Sarah, Plain and Tall*). A test preparation program prepares students for standardized tests.



Curriculum Items

- *Classics for Young Readers*, Vol. 4A
- *Classics for Young Readers*, Vol. 4B
- *Writing in Action*, Vol. C
- *Writing in Action*, Vol. D
- *Exercises in English*, Millennium Ed. (Level D)
- *New Vocabulary Workshop Workbook* (Orange)
- *Test Ready Plus: Language Arts*, Book 4
- *Test Ready Plus: Reading*, Book 4
- *Robinson Crusoe* by Daniel Defoe (K¹² edition, retold for young readers)
- *Feathers, Flippers, and Fur*
- *If You Lived in the Days of the Knights* by Ann McGovern
- *Nature's Way*
- *Pollyanna* by Eleanor Porter (K¹² edition, abridged for young readers)
- Keyboarding CD
- Word processing book
- White dry-erase board

Fifth Grade Language Arts

Language Skills

- **Composition:** Students practice writing, from planning to proofreading, as they write a memoir, an editorial, a research paper, a business letter, and more.
- **Grammar, Usage, and Mechanics:** Students learn about parts of speech, punctuation, and research skills. They continue sentence analysis and diagramming.
- **Vocabulary:** The Vocabulary Workshop helps students enrich their vocabulary, develop word analysis skills, and prepare for standardized tests.
- **Spelling:** Students learn sound-symbol relationships and spelling patterns, identify affixes and how they affect the meaning of words, and recognize base words and roots in related words.

Literature

Students analyze, compare, and creatively respond to a variety of works. The emphasis is on classic works, including tales of Robin Hood and St. George; selections from *Don Quixote* and Shakespeare's *The Tempest* and *A Midsummer Night's Dream*; *Rip Van Winkle* and *The Legend of Sleepy Hollow*; and Sherlock Holmes mysteries. Students read works of nonfiction, as well as four novels (selected from a long list of such classics as *Pippi Longstocking*, *Call It Courage*, and *The Lion, the Witch, and the Wardrobe*).

Curriculum Items

- *Classics for Young Readers*, Vol. 5A
- *Classics for Young Readers*, Vol. 5B
- *American Lives & Legends*
- *Exercises in English*, Millennium Ed. (Level E)
- *Vocabulary Workshop* (Blue)
- *Test Ready: Language Arts*, Book 5
- *Test Ready: Reading Longer Passages*, Book 5
- *Paddle-to-the-Sea* by Holling Clancy Holling
- *American Tall Tales* by Adrien Stoutenburg
- *Bard of Avon: The Story of William Shakespeare* by Diane Stanley and Peter Vennema
- *Curious Creatures*
- *Writing in Action*, Vol. 5E
- *Writing in Action*, Vol. 5F
- *I Didn't Know That!*
- *Don Quixote* by Miguel de Cervantes (K¹² edition, retold for young readers)
- Keyboarding CD
- Word processing book
- White dry-erase board

Intermediate English A

Intermediate English A is the first in a sequence of courses for middle school students (grades 6–8). The program helps develop students' written and oral communication skills, and is designed to give students the essential building blocks for expressing their own ideas in standard English.

Students write a variety of compositions in genres they will encounter throughout their academic careers, and practice grammar, usage, mechanics, and vocabulary.

In Intermediate English A, students read short stories, poetry, drama, novels, essays, and informative articles. The course sharpens reading comprehension skills, engages readers in literary analysis, and offers a variety of literature to suit diverse tastes.

Curriculum Items

- *Myths of Ancient Greece and Rome* (an anthology from K¹²)
- *The Secret Garden* by Francis Hodgson Burnett
- *The Adventures of Tom Sawyer* by Mark Twain
- *Animal Adventures* (nonfiction collection)
- *Believing Our Eyes and Ears* (nonfiction collection)
- *Classics for Young Readers*, Vol. 6 CD

- *Classics for Young Readers, Vol. 6: An Audio Companion*
- *Twelfth Night* (Shakespeare for Young Readers adaptation)
- Keyboarding CD
- Word processing book
- *BK English Language Handbook, Grade 6* Barrett Kendall Publishing
- Vocabulary

Novels

Students read any three novels of their choice from a selection of award-winning works by renowned authors, from a variety of genres: fantasy, science fiction, historical fiction, realistic fiction, and mystery. (Novels are not part of the standard materials, but are readily available at the library or for purchase in bookstores or online.)

Intermediate English B

Intermediate English B is the second in a sequence of courses for middle school students (grades 6–8). The program helps develop students' written and oral communication skills and is designed to give students the essential building blocks for expressing their own ideas in standard English.

Students also practice composition, grammar, usage, mechanics, and vocabulary. With Intermediate English B, students read short stories, poetry, drama, novels, and informative articles.

Curriculum Items

- *Classics for Young Readers, Vol. 7*
- *Classics for Young Readers, Vol. 7: An Audio Companion*
- *BK English Language Handbook, Grade 7*, Barrett Kendall Publishing
- *Vocabulary from Classical Roots, Book B*, Educator's Publishing Service
- *The Iliad and The Odyssey: Stories from Homer's Epics* (an anthology from K¹²)
- *The Hobbit* by J.R.R. Tolkien
- *Treasure Island* by Robert Louis Stevenson
- *City* by David Macaulay
- *Julius Caesar* (Shakespeare for Young Readers adaptation)
- Keyboarding CD
- Word processing book

Novels

This program allows students to read any three novels of their choice from a selection of award-winning works

by renowned authors, from a variety of genres: fantasy, science fiction, historical fiction, realistic fiction, and mystery. (Novels are not part of the standard materials, but are readily available at the library or for purchase in bookstores or online.)

Literary Analysis and Composition

The first in a sequence of college-preparatory English courses, Literary Analysis and Composition is designed to improve students' written and oral communication skills and to strengthen their ability to understand and analyze literature.

Readings include:

- **Novels:** Students choose four out of seven offered titles, including: *Jane Eyre* by Charlotte Brontë, *Great Expectations* by Charles Dickens, *Animal Farm* by George Orwell, and *To Kill a Mockingbird* by Harper Lee
- **Drama:** *Romeo and Juliet* by William Shakespeare, *Antigone* by Sophocles
- **Short stories** by Langston Hughes, Shirley Jackson, Jack London, Guy de Maupassant, Edgar Allan Poe, James Thurber, and more
- **Poetry** by W. H. Auden, Gwendolyn Brooks, e. e. cummings, Emily Dickinson, Robert Frost, Gerard Manley Hopkins, James Weldon Johnson, John Keats, Henry Wadsworth Longfellow, Pablo Neruda, Octavio Paz, William Shakespeare, Dylan Thomas, William Butler Yeats, and more
- **Autobiography:** Selections by Mark Twain, Ernesto Galarza, and Maya Angelou; *Narrative of the Life of Frederick Douglass* or *Anne Frank: Diary of a Young Girl*

Curriculum Items

- *Classics for Young Readers, Vol. 8*
- *Classics for Young Readers, Vol. 8: An Audio Companion*
- *BK English Language Handbook, Level 1*, Barrett Kendall Publishing
- *Vocabulary from Classical Roots, Book C*, Educators' Publishing Service
- *Narrative of the Life of Frederick Douglass* by Frederick Douglass
- *Anne Frank: Diary of a Young Girl* by Anne Frank
- *Romeo and Juliet* (new version)



MARK¹² Reading I (Adaptive Remediation)

Mastery. Acceleration. Remediation. K¹². MARK¹² courses are for students in the third to fifth grades who are struggling readers. MARK¹² Reading I gives students who are reading several grades below grade level the opportunity to master missed concepts in a way that accelerates them through the remediation process by incorporating adaptivity and online assessments. Students work independently and with a Learning Coach to develop oral reading, comprehension, phonics, spelling, and fluency skills. They also practice grammar, usage, mechanics, and composition. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success.

Curriculum Items

- *MARK¹² Reading Lesson Guide, Volume 1*
- *MARK¹² Reading Activity Book, Volume 1*
- *MARK¹² Classics for Young Readers, Volume 1*
- *Just Write! Levels 1 and 2*
- Online tile kit
- Pencils
- Index cards
- Markers

MARK¹² Reading II (Adaptive Remediation)

Mastery. Acceleration. Remediation. K¹². MARK¹² courses are for students in the third to fifth grades who are struggling readers. MARK¹² Reading II gives students who are reading two or more grades below grade level the opportunity to master missed concepts in a way that accelerates them through the remediation process by incorporating adaptivity and online assessments. Students work independently and with a Learning Coach to develop oral reading, comprehension, phonics, spelling, and fluency skills. They also practice grammar, usage, mechanics, and composition. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success.

Curriculum Items

- *MARK¹² Reading Lesson Guide, Volume 2*
- *MARK¹² Reading Activity Book, Volume 2*
- *MARK¹² Classics for Young Readers, Volume 2*
- *Writing in Action, Level A*

- Online tile kit
- Pencils
- Index cards
- Markers

MARK¹² Reading III (Adaptive Remediation)

Mastery. Acceleration. Remediation. K¹². MARK¹² courses are for students in the third to fifth grades who are struggling readers. MARK¹² Reading III gives students who are reading approximately two grades below grade level the opportunity to master missed concepts in a way that accelerates them through the remediation process by incorporating adaptivity and online assessments. Students work independently and with a Learning Coach to develop oral reading, comprehension, phonics, spelling, and fluency skills. They also practice grammar, usage, mechanics, and composition. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success.

Curriculum Items

- *MARK¹² Reading Lesson Guide, Volume 3*
- *MARK¹² Reading Activity Book, Volume 3*
- *MARK¹² Classics for Young Readers, Volume 3*
- *Writing in Action, Level B*
- Online tile kit
- Pencils
- Index cards
- Markers

Math⁺ K (Blue)

This research-based course focuses on computational fluency, conceptual understanding, and problem-solving. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success. This course introduces Kindergarten students to numbers through 30. Students learn through reading, writing, counting, comparing, ordering, adding, and subtracting. They experience problem solving and encounter early concepts in place value, time, length, weight, and capacity. They learn to gather and display simple data. Students also study two- and three-dimensional figures—they identify, sort, study patterns, and relate mathematical figures to objects within their environment.

Curriculum Items

- Activity book
- Custom K¹² block set
- Lesson guide book
- Items easily found in a typical home

Math⁺ 1 (Green)

This research-based course focuses on computational fluency, conceptual understanding, and problem-solving. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success. This course for students in Grade 1 extends their work with place value to numbers through 100, emphasizing fluency of addition and subtraction facts, and focusing on number sentences and problem solving with addition and subtraction. Students begin work with money, telling time, ordering events, and measuring length, weight, and capacity with non-standard units. Students identify attributes of geometric figures and also extend their work with patterns and data, including representing and comparing data.

Curriculum Items

- Activity book
- Custom K¹² block set
- Lesson guide book
- Base-10 blocks set
- Place-value mat
- Items easily found in a typical home

Math⁺ 2 (Orange)

This research-based course focuses on computational fluency, conceptual understanding, and problem-solving. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success. This course for students in Grade 2 focuses primarily on number concepts, place value, and addition and subtraction of numbers through 1,000. Special emphasis is given to problem solving, inverse operations, properties of operations, decomposition of numbers, and mental math. Students study money, time, and measurement; geometric figures; analyzing and displaying data with new representations; and determining the range and mode of data. Early concepts about multiplication, division, and fractions are introduced.

Curriculum Items

- Activity book
- Custom K¹² block set
- Lesson guide book
- Base-10 blocks set
- Place-value mat
- Items easily found in a typical home

Math⁺ 3 (Purple)

This research-based course focuses on computational fluency, conceptual understanding, and problem-solving. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success. This course for students in Grade 3 provides a quick overview of whole number addition and subtraction, but has a greater focus on whole number multiplication and division, encompassing early algebraic thinking. Decimals are studied in relationship to place value and money, and fractions are addressed through multiple representations and probability. Students are introduced to specific methods and strategies to help them become more effective problem solvers. Geometry and measurement are addressed through the study of two- and three-dimensional shapes, early work with perimeter, area, and volume, and applying measuring techniques to time, length, capacity, and weight.

Curriculum Items

- Textbook
- Custom K¹² block set
- Lesson guide book
- Base-10 blocks set
- Place-value mat
- Items easily found in a typical home

Math⁺ 4 (Red)

This research-based course focuses on computational fluency, conceptual understanding, and problem-solving. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success. This course for students in Grade 4 moves into applications and properties of operations. Students work with simple fraction and decimal operations, which are applied in the study of measurement, probability, and data, and mathematical reasoning techniques. Students begin



the study of equivalencies between fractions and decimals on the number line and early work with integers. Algebraic thinking is developed as students work with variables, coordinate graphing, and formulas in problems involving perimeter, area, and rate. Geometry is extended into greater classification of shapes and work with lines, angles, and rotations.

Curriculum Items

- Textbook
- Color tiles set
- Lesson guide book
- Protractor
- Items easily found in a typical home

Math⁺ 5 (Yellow)

This research-based course focuses on computational fluency, conceptual understanding, and problem-solving. The engaging course features new graphics, learning tools, and games; adaptive activities that help struggling students master concepts and skills before moving on; and more support for Learning Coaches to guide their students to success. This course for students in Grade 5 investigates whole numbers through practical situations in rounding, exponents and powers, and elementary number theory. Students begin addition and subtraction of integers and apply all of their work with rational numbers to problem-solving experiences. The study of algebra includes work with variables, solving equations and inequalities, using formulas within geometry and measurement, and work within the coordinate system. The study of geometry encompasses properties of lines, angles, two- and three-dimensional figures, and formal constructions and transformations.

Curriculum Items

- Textbook
- Lesson guide book
- Protractor
- Items easily found in a typical home

Fundamentals of Geometry and Algebra

Students enhance computational and problem-solving skills while learning topics in algebra, geometry, probability, and statistics. They solve expressions and equations in the context of perimeter, area, and volume problems while

further developing computational skills with fractions and decimals. The study of plane and solid figures includes construction and transformations of figures. Also in the context of problem solving, students add, subtract, multiply, and divide positive and negative integers and solve problems involving ratios, proportions, and percents, including simple and compound interest, rates, discount, tax, and tip problems. They learn multiple representations for communicating information, such as graphs on the coordinate plane, statistical data and displays, as well as the results of probability and sampling experiments. They investigate patterns involving addition, multiplication, and exponents and apply number theory and computation to mathematical puzzles.

Curriculum Items

- *Fundamentals of Geometry and Algebra: A Reference Guide and Problem Sets*
- *Fundamentals of Geometry and Algebra: Student Guide*
- *Fundamentals of Geometry and Algebra: Learning Coach Guide*

Pre-Algebra

In this course, students take a broader look at computational and problem-solving skills while learning the language of algebra. Students translate word phrases and sentences into mathematical expressions; analyze geometric figures; solve problems involving percentages, ratios, and proportions; graph different kinds of equations and inequalities; calculate statistical measures and probabilities; apply the Pythagorean theorem; and explain strategies for solving real-world problems. Students who take this course are expected to have mastered the skills and concepts of the K¹² Fundamentals of Geometry and Algebra course (or equivalent).

Curriculum Items

- *Pre-Algebra: Reference Guide and Problem Sets*

Algebra

Students develop algebraic fluency by learning the skills needed to solve equations and perform manipulations with numbers, variables, equations, and inequalities. They also learn concepts central to the abstraction and generalization that algebra makes possible. Students learn to use number properties to simplify expressions or justify

statements; describe sets with set notation and find the union and intersection of sets; simplify and evaluate expressions involving variables, fractions, exponents, and radicals; work with integers, rational numbers, and irrational numbers; and graph and solve equations, inequalities, and systems of equations. They learn to determine whether a relation is a function and how to describe its domain and range; use factoring, formulas, and other techniques to solve quadratic and other polynomial equations; formulate and evaluate valid mathematical arguments using various types of reasoning; and translate word problems into mathematical equations and then use the equations to solve the original problems. Students who take Algebra are expected to have mastered the skills and concepts presented in the K¹² Pre-Algebra course (or equivalent).

Curriculum Items

- *Algebra I: Reference Guide and Problem Sets*

Kindergarten Science

Kindergarten students begin to develop observation skills as they learn about the five senses, the Earth's composition, and the basic needs of plants and animals.

Curriculum Items

- Plastic pipette
- Safety glasses
- Basic thermometer
- Bar magnets (pair)
- Magnifying glass
- Mirror
- Inflatable globe
- *Animals in Winter* by Henrietta Bancroft and Richard G. Van Gelder
- *My Five Senses* by Alike
- *The Big Dipper* by Franklyn Branley
- *What's Alive?* by Kathleen Weidner Zoehfeld

First Grade Science

Students learn to perform experiments, record observations, and understand how scientists see the natural world. They germinate seeds to observe plant growth, and make a weather vane.

Curriculum Items

- Bean seeds
- Grass seeds
- Directional compass

- Graduated cylinder, 100 mL
- Basic thermometer
- Plastic pipette
- Safety goggles
- Magnifying glass
- Bar magnets (pair)
- Mirror
- Feathers
- Centimeter gram cubes
- Primary balance
- Iron filings
- Styrofoam ball (2" diameter)
- Mylar paper, silver
- Inflatable globe
- *An Octopus Is Amazing* by Patricia Lauber
- *Down Comes the Rain* by Franklyn Branley
- *Flash, Crash, Rumble, and Roll* by Franklyn Branley
- *What Color Is Camouflage?* by Carolyn Otto
- *What Is the World Made Of?* by Kathleen Weidner Zoehfeld

Second Grade Science

Students perform experiments to develop skills of observation and analysis and learn how scientists understand our world. They demonstrate how pulleys lift heavy objects, make a temporary magnet and test its strength, and analyze the parts of a flower.

Curriculum Items

- Bean seeds
- Grass seeds
- Directional compass
- Graduated cylinder, 100 mL
- Primary rock and mineral kit
- Basic thermometer
- Plastic pipette
- Safety goggles
- Magnifying glass
- Centimeter gram cubes
- Primary balance
- Iron filings
- Bar magnets
- Latch magnet
- Ring magnet
- Horseshoe magnet
- 10 Newton spring scale
- Pulley
- Unmarked thermometer
- *Fossils Tell of Long Ago* by Alike
- *Let's Go Rock Collecting* by Roma Gans



- *What Happens to a Hamburger?* by Paul Showers
- *What Makes a Magnet?* by Franklyn Branley
- *Why Frogs Are Wet* by Judy Hawes

Third Grade Science

Students learn to observe and analyze through hands-on experiments and gain further insight into how scientists understand our world. They observe and chart the phases of the moon, determine the properties of insulators and conductors, and make a three-dimensional model of a bone.

Curriculum Items

- *A Walk in the Boreal Forest: Biomes of North America Series*
- *A Walk in the Desert: Biomes of North America Series*
- *A Walk in the Rainforest: Biomes of North America Series*
- *A Walk in the Tundra: Biomes of North America Series*
- *A Walk in the Deciduous Forest: Biomes of North America Series*
- *A Walk in the Prairie: Biomes of North America Series*
- *Sunshine Makes the Seasons* by Franklyn Branley
- *The Moon Seems to Change* by Franklyn Branley
- Graduated cylinder, 100 mL
- Directional compass
- Safety goggles
- Magnifying glass
- Advanced thermometer
- Clay (four colors)
- Modeling clay
- Directional compass

Fourth Grade Science

Students develop scientific reasoning and perform hands-on experiments in Earth, life, and physical sciences. They construct an electromagnet, identify minerals according to their properties, use chromatography to separate liquids, and assemble food webs.

Curriculum Items

- Bar magnets (pair)
- Safety goggles
- Graduated cylinder, 100 mL
- Lamp bulb receptacles
- Lamp bulbs
- Magnifying glass
- Intermediate rock and mineral kit
- Advanced thermometer
- Invertebrates
- *The History of Life Through Fossils* (Lickle Publishing)

- Clay (four colors)
- Bare copper wire
- Gravel
- Adding machine paper
- Pipe cleaners
- Sand
- Seashell
- White tile
- Plastic aquarium tubing

Fifth Grade Science

Students perform experiments, develop scientific reasoning, and recognize science in the world around them. They build a model of a watershed, test how cell membranes function, track a hurricane, and analyze the effects of gravity.

Curriculum Items

- Alum
- Test tube
- Safety goggles
- Graduated cylinder, 100 mL
- Litmus paper
- 30 Newton spring scale
- Advanced thermometer
- *How Bodies Work*
- *Classifying Life*
- Marble in bag
- Clay (four colors)
- Potting soil
- Coarse gravel
- Pea gravel
- Coarse sand
- Fine sand
- Plastic box
- Tagboard

Earth Science

The Earth Science curriculum builds on the natural curiosity of students. By connecting them to the beauty of geological history, the amazing landforms around the globe, the nature of the sea and air, and the newest discoveries about our universe, the curriculum gives students an opportunity to relate to their everyday world.

Curriculum Items

- Wall map set (science/history)
- Graduated cylinder, 100 mL
- Graduated cylinder, 500 mL

- Pipe cleaners
- Advanced rock and mineral kit
- Diffraction grating film
- Stopwatch
- Grape seeds
- Latch magnet
- Safety glasses
- Magnifying glass
- Centimeter gram cubes
- Clay (four colors)
- Fine sand
- White tile
- Advanced thermometer

Advanced Earth Science

Advanced Earth Science is a rigorous middle school course. It was conceived for the student who loves geology or meteorology and is ready for an extra challenge. Students tackle such topics as rocks and minerals, plate tectonics and the drifting of continents, volcanoes, earthquakes, oceanography, weather, and astronomy. Practical, hands-on lesson activities help students discover how scientists investigate the living world. Students perform laboratory activities and a full unit investigation to learn about the application of scientific methods.

Standard Curriculum Items

- Wall map set (science/history)
- Graduated cylinder, 250 mL
- Pipe cleaners
- Advanced rock and mineral kit
- Diffraction grating film
- Stopwatch
- Latch magnet
- Safety glasses
- Magnifying glass
- Centimeter gram cubes
- Clay (four colors)
- Fine sand
- White tile
- Advanced thermometer

Life Science

The K¹² Life Science program invites students to investigate the world of living things—at levels both large and small—by reading, observing, and experimenting with aspects of life on Earth. Students explore an amazing variety of organisms,

the complex workings of the cell, the relationship between living things and their environments, and discoveries in the world of modern genetics. Practical, hands-on lesson activities help students discover how scientists investigate the living world. Students perform laboratory activities and a full unit investigation to learn about the application of scientific methods.

Standard Curriculum Items

- Graduated cylinder, 100 mL
- Compound microscope
- Radish seeds
- Microscope slides (set of 12)
- Slide cover slips (set of 12)
- Transparencies (set of 12)
- Petri dishes
- Agar vials
- Rhizobium bacteria
- Green bean bush seeds
- Blue Fescue grass seeds
- Safety glasses
- Magnifying glass
- Advanced thermometer

Advanced Life Science

Advanced Life Science is a rigorous middle school course, conceived for the student who loves biology and is ready for an extra challenge. Students tackle such topics as ecology, microorganisms, animals, plants, cells, and genetics. They are also introduced to gene expression and other aspects of cell biology. Practical, hands-on lesson activities help students discover how scientists investigate the living world. Students perform laboratory activities and a full unit investigation to learn about the application of scientific methods.

Standard Curriculum Items

- Graduated cylinder, 100 mL
- Compound microscope
- Radish seeds
- Microscope slides (set of 12)
- Slide cover slips (set of 12)
- Transparencies (set of 12)
- Petri dishes
- Agar vials
- Rhizobium bacteria
- Green bean bush seeds
- Blue Fescue grass seeds
- Safety glasses



- Magnifying glass
- Advanced thermometer

NOTE: List subject to change.

Physical Science

The K¹² Physical Science program introduces students to many aspects of the physical world, focusing first on chemistry and then on physics. The course provides an overview of the physical world and gives students tools and concepts to think clearly about atoms, molecules, chemical reactions, motion, electricity, light, and other aspects of chemistry and physics.

Standard Curriculum Items

- Graduated cylinder, 250 mL
- Stopwatch
- 10 Newton spring scale
- Digital scale
- Double pulley
- Lye
- Metallic rod
- Metallic spring
- Muriatic acid
- Phenolphthalein
- Protective gloves (two pair)
- D cell battery holder
- Cork stoppers
- Lead weight (500 g)
- Enamel-coated, heavy-gauge copper wire
- Non-insulated copper wire
- Insulated copper wire strips (set of five)

Advanced Physical Science

Advanced Physical Science is a rigorous middle school course conceived for the enthusiastic science student who is ready for an extra challenge. Students learn about the physical world and tackle topics such as matter, energy, atoms, motion, thermodynamics, and other aspects of chemistry and physics. Practical, hands-on lesson activities help students discover how scientists investigate the living world. Students perform laboratory activities and a full unit investigation to learn about the application of scientific methods.

Standard Curriculum Items

- Graduated cylinder, 250 mL
- Stopwatch
- 10 Newton spring scale
- Digital scale
- Double pulley
- Lye
- Metallic rod
- Metallic spring
- Muriatic acid
- Phenolphthalein
- Protective gloves (two pair)
- D cell battery holder
- Cork stoppers
- Lead weight (500 g)
- Enamel coated heavy gage copper wire
- Non-insulated copper wire
- Insulated copper wire strips (set of five)
- Directional compass
- Bar magnet (pair)
- Plastic pipette
- Safety glasses
- Iron filings
- Safety glasses
- Iron filings
- Lamp bulbs (set of four)
- Lamp bulb receptacle (set of two)
- Advanced thermometer

NOTE: List subject to change.

Kindergarten History

This beginning course teaches the basics of world geography through a storybook tour of the seven continents and provides an introduction to American history and civics through a series of biographies of famous Americans. Supplementary lessons introduce students to symbols that represent American freedom; the laws, rights, and responsibilities of citizens; the cultures and traditions of the United States; and basic economic concepts.

Curriculum Items

- U.S./world map (K–2)
- Inflatable globe (K–2)
- *Let's Journey: Around the World* CD
- *Bringing the Rain to Kapiti Plain* by Verna Aardema
- *Follow the Drinking Gourd* by Jeannette Winter

- *Madeline* by Ludwig Bemelmans
- *Possum Magic* by Mem Fox
- *Rechenka's Eggs* by Patricia Polacco
- *The Great Kapok Tree* by Lynne Cherry
- *The Story of Ferdinand* by Munro Leaf and Robert Lawson
- *The Story About Ping* by Marjorie Flack and Kurt Wiese
- *When Clay Sings* by Byrd Baylor

First Grade History

First Grade History kicks off a program that, spanning the elementary grades, provides an overview of world geography and history from the Stone Age to the Space Age. This course takes students through the age of classical civilizations. Supplementary lessons focus on concepts in economics and citizenship.

Standard Curriculum Items

- U.S./world map (K–2)
- Inflatable globe (K–2)
- CD: *Tales From The Old Testament* by Jim Weiss
- CD: *Greek Myths* by Jim Weiss
- *Mummies* by Joyce Milton
- *The Egyptian Cinderella* by Shirley Climo
- *Tut's Mummy: Lost and Found* by Judy Donnelly
- *The Trojan Horse* by Emily Little

Second Grade History

Continuing a program that, spanning the elementary grades, explores world geography and history from the Stone Age to the Space Age, this course focuses on the time from ancient Rome to the later Middle Ages. Supplementary lessons focus on concepts in economics and citizenship.

Curriculum Items

- U.S./world map (K–2)
- Inflatable globe (K–2)
- *Knights in Shining Armor* by Gail Gibbons
- *Pompeii ... Buried Alive* by Edith Kunhardt
- *Saint Valentine* by Robert Sabuda
- *The Hundredth Name* by Shulamith Levey Oppenheim
- *Saint George and the Dragon* by Margaret Hodges
- *Sundiata: Lion King of Mali* by David Wisniewski

Third Grade History

Part of a program that, spanning the elementary grades, explores world geography and history from the Stone Age to the Space Age, this course focuses on the period from the Renaissance through to the American Revolution. Supplementary lessons focus on concepts in economics and citizenship.

Curriculum Items

- *Michelangelo* by Mike Venezia
- *America 1492* ("Kids Discover" Magazine)
- *The Revolutionary War* by Brendan January (Children's Press, 2000)
- *Understanding Geography Level 3— Map Skills and Our World* (maps.com, 2006)
- Inflatable globe (3–6)
- U.S./world map (3–5)

Fourth Grade History

Concluding a program that, spanning the elementary grades, explores world geography and history from the Stone Age to the Space Age, this course focuses on the period from the Scientific Revolution to modern times. Supplementary lessons focus on concepts in economics and citizenship.

Curriculum Items

- *Understanding Geography Level 4—Map Skills and Our World* (maps.com, 2006)
- Inflatable globe (3–6)
- U.S./world map (3–5)
- *Charles Dickens: The Man Who Had Great Expectations* by Diane Stanley and Peter Vennema
- *Inventors: A Library of Congress Book* by Martin Sandler
- *The U.S. Constitution and You* by Syl Sobel

American History Before 1865

The first half of a detailed two-year survey of the history of the United States, this course takes students from the arrival of the first people in North America through the Civil War. Lessons integrate topics in geography, civics, and economics. Building on the award-winning series *A History of US*, the course guides students through critical episodes in the story of America.



Curriculum Items

(subject to change)

- U.S./world map (3–5)
- *Understanding Geography Level 5— Map Skills and Our World* (maps.com, 2006)
- *A History of US: The Concise School Edition*

American History Since 1865

The second half of a detailed two-year survey of the history of the United States, this course takes students from the end of the Civil War to the dawn of the 21st century. Lessons integrate topics in geography, civics, and economics. Students should have completed K¹² American History Before 1865 or have demonstrated familiarity with American history through Civil War times. Building on the award-winning series *A History of US*, the course guides students through critical episodes in the story of post-Civil War America.

Curriculum Items

(subject to change)

- Wall map set
- *A History of US: The Concise School Edition*

Intermediate World History A: From Prehistory Through the Middle Ages

In this first part of a survey of world history from prehistoric to modern times, K¹² online lessons and assessments complement *The Human Odyssey*, a textbook series developed and published by K¹². This course focuses on the development of civilization across a 12,000-year span: from the Ice Age to the Middle Ages; from cave paintings to stained glass windows; from crude huts to Gothic cathedrals.

Curriculum Item

- *The Human Odyssey, Volume 1: Prehistory Through the Middle Ages*

Intermediate World History B: Our Modern World, 1400 to 1914

Continuing a survey of world history from prehistoric to modern times, K¹² online lessons and assessments complement the second volume of *The Human Odyssey*, a textbook series developed and published by K¹². This course focuses on the story of the past, from the 15th century to 1914 and the beginning of World War I. The course is organized chronologically and, within broad eras, regionally. Lessons explore developments in religion, philosophy, the arts, and science and technology. The

course introduces geography concepts and skills as they appear in the context of the historical narrative.

Curriculum Item

- *The Human Odyssey, Volume 2: Our Modern World, 1400 to 1914*

Kindergarten Art

Students are introduced to the elements of art—line, shape, color, and more. They learn about portraits and landscapes, and realistic and abstract art.

Curriculum Items

- *Come Look with Me: Enjoying Art with Children* by Gladys S. Blizzard
- *Come Look with Me: Animals in Art* by Gladys S. Blizzard
- Art Print Kit, Kindergarten
- Paintbrush, tempera, flat bristle 1
- Paintbrush, tempera, medium #4
- Paintbrush, tempera, large #8
- Modeling clay, assorted colors
- Tempera paint set
- Oil pastels

First Grade Art

Following the timeline of K¹² History, First Grade Art lessons include an introduction to the art and architecture of different cultures, such as Mesopotamia and ancient Egypt, Greece, and China.

Curriculum Items

- *Come Look with Me: Exploring Landscape Art with Children* by Gladys S. Blizzard
- *Come Look with Me: World of Play* by Gladys S. Blizzard
- Art Print Kit, Grade 1
- Paintbrush, tempera, flat bristle 1
- Paintbrush, tempera, medium #4
- Paintbrush, tempera, large #8
- Modeling clay, assorted colors
- Tempera paint set
- Oil pastels

Second Grade Art

Second Grade Art lessons include an introduction to the art and architecture of ancient Rome, medieval Europe, Islam, Mexico, Africa, China, and Japan.

Curriculum Items

- *How Artists See Play* by Colleen Carroll
- *How Artists See Animals* by Colleen Carroll
- Art Print Kit, Grade 2
- Paintbrush, tempera, flat bristle 1
- Paintbrush, tempera, medium #4
- Paintbrush, tempera, large #8
- Modeling clay, assorted colors
- Tempera paint set
- Oil pastels

Third Grade Art

Following the timeline of K¹² History, Third Grade Art lessons include an introduction to the art and architecture of the Renaissance throughout Europe, including Italy, Russia, and northern Europe. Students also investigate artworks from Asia, Africa, and the Americas created during the same time period.

Curriculum Items

- *How Artists See Families* by Colleen Carroll
- *How Artists See Work* by Colleen Carroll
- Art Print Kit, Grade 3
- Paintbrush, tempera, flat bristle 1
- Paintbrush, tempera, small #1
- Paintbrush, tempera, medium #4
- Paintbrush, tempera, large #8
- Modeling clay, assorted colors
- Tempera paint set
- Oil pastels

Fourth Grade Art

Lessons include an introduction to the artists, cultures, and great works of art and architecture from the French and American revolutions through modern times.

Curriculum Items

- *Come Look at Me: The Artist at Work* by R. Sarah Richardson
- *Come Look at Me: Exploring Modern Art* by Jessica Noelani Wright
- Art Print Kit, Grade 4
- Paintbrush, tempera, flat bristle 1
- Paintbrush, tempera, small #1
- Paintbrush, tempera, medium #4
- Paintbrush, tempera, large #8
- Tempera paint set
- Burlap

Intermediate Art: American A

Intermediate Art: American A includes an introduction to the artists, cultures, and great works of art and architecture of North America, from pre-Columbian times through 1877.

Curriculum Items

- *Come Look With Me: Art in Early America* by Randy Osofsky
- *Come Look With Me: Exploring American Indian Art* by Stephanie Salomon
- Art Print Kit, Intermediate Art: American A
- Paintbrush, tempera, small #1
- Paintbrush, tempera, medium #4
- Paintbrush, tempera, large #8
- White self-hardening clay
- Tempera paint set
- Acrylic paint set
- Burlap
- Oil pastels

Intermediate Art: American B

Intermediate Art: American B is designed to complement K¹² American History Since 1865. Following the same historical timeline, lessons include an introduction to the artists, cultures, and great works of American art and architecture from the end of the Civil War through modern times.

Curriculum Items

- Art Print Kit, Intermediate Art: American B
- Paintbrush, acrylic, small #1
- Paintbrush, acrylic, medium #4
- Paintbrush, acrylic, large #8
- Paintbrush, acrylic, Flat Bristle 1/2
- Pastalina clay (10 colors)
- Acrylic paint set
- Oil pastels

Intermediate Art: World A

Intermediate Art: World A is designed to complement Intermediate World History A: From Prehistory Through the Middle Ages. Following the same historical timeline, lessons include an introduction to the artists, cultures, and great works of world art and architecture from ancient through medieval times.



Curriculum Items

- Art Print Kit, Intermediate Art: World A
- Paintbrush, acrylic, small #1
- Paintbrush, acrylic, medium #4
- Paintbrush, acrylic, large #8
- White self-hardening clay
- Acrylic paint set

Intermediate Art: World B

K¹² Intermediate Art: World B is designed to complement World History: Our Modern World, 1400 to 1917. Following the same historical timeline, lessons include an introduction to the artists, cultures, and great works of world art and architecture from the Renaissance through modern times.

Curriculum Item

- Art Print Kit, Intermediate Art: World B

Preparatory Music

Kindergarten students learn about music through lively activities, including listening, singing, and moving. Through games and folk songs from diverse cultures, students learn musical concepts such as high and low, or loud and soft. Creative movement activities help students enjoy the music of composers such as Grieg and Haydn.

Curriculum Items

- *Let's Learn Music* video, Volume K
- *Let's Listen* CD, Volume K
- *Let's Sing* CD, Volume K
- *Let's Sing* songbook, Volume K
- Tambourine
- Slide whistle

Beginning 1 Music

Beginning 1 Music is for first grade students, as well as students of second grade age who are new to K¹². In this course, traditional games and folk songs from many cultures help students begin to read and write simple melodic and rhythmic patterns. Students are introduced to the instruments of the orchestra through Prokofiev's classic *Peter and the Wolf*. They explore how music tells stories in *The Sorcerer's Apprentice* and are introduced to opera through a lively unit on Mozart's *Magic Flute*.

Curriculum Items

- *Let's Learn Music* video, Volume 1
- *The Magic Flute* CD
- *Let's Listen* CD, Volume 1
- *Let's Sing* CD, Volume 1
- *Let's Sing* songbook, Volume 1
- *Let's Learn Rhythm* CD-ROM
- Tambourine
- Slide whistle

Beginning 2 Music

Beginning 2 Music is for students who have completed the K¹² Beginning 1 Music program. Through traditional folk songs and games, students learn to read more complicated melodic patterns and rhythms. As students listen to works by great composers, such as Vivaldi and Saint-Saëns, they learn to recognize these patterns in the music.

Curriculum Items

- *Let's Learn Music* video, Volume 2
- *Let's Listen* CD, Volume 2
- *Let's Sing* CD, Volume 2
- *Let's Sing* songbook, Volume 2

Introduction to Music

Introduction to Music is for students in grades 3–5 who are new to K¹² and just beginning their study of music. Using traditional folk songs, students learn most of the skills covered in the K¹² Beginning 1 and 2 Music courses. They learn to recognize and write melodic and rhythmic patterns with four elements, and they practice recognizing these patterns in the music of great composers, such as Beethoven and Brahms. Students become familiar with instruments of the orchestra as they listen to music composed by Vivaldi, Saint-Saëns, Holst, and others.

Curriculum Items

- *Let's Learn Music* video, Volume 2
- *Let's Sing* CD, Volume 2
- *Let's Sing* songbook, Volume 2
- *Let's Listen* CD, Volume 2
- *Let's Learn Rhythm* CD-ROM
- Tambourine
- Slide whistle

Intermediate 1 Music

Intermediate 1 Music is intended for students of third grade age or older who have completed prerequisite courses—the K¹² Beginning 1 and 2, or Introduction to Music classes.

Through traditional folk songs and games, students learn to read and write a variety of musical patterns. They learn to play simple melodies and rhythms on the recorder. They become more familiar with the orchestra, especially the woodwind and brass families, and learn about the lives and works of Bach, Handel, Haydn, Mozart, and Beethoven.

Curriculum Items

- *Let's Learn the Recorder* video
- *Let's Sing* CD, Volume 3
- *Let's Listen* CD, Volume 3
- *Let's Sing* songbook, Volume 3
- Recorder

Intermediate 2 Music

Intermediate 2 Music begins by introducing notes that are lower or higher than the familiar lines and spaces of the staff. Students expand their knowledge of rhythm and learn about the Romantic period in music. Students also study harmony and practice recognizing pentatonic patterns. Finally, they take a musical trip through Europe, Africa, the Middle East, the Caribbean, Japan, and China.

Curriculum Items

- *Let's Sing* CD, Volume 4
- *Let's Sing* songbook, Volume 4
- *Let's Listen* CD, Volume 4

Intermediate 3 Music

Intermediate 3 Music introduces students to all the notes of the major scale, from low *So* all the way up to high *Do*. Students also learn to recognize and sing the natural minor scale. They expand their knowledge of rhythm with simple syncopated patterns. This semester introduces the Modern period in music, with listening activities to help students recognize Modern music and identify pieces by individual composers. Near the end of the year, students explore American folk music as they follow the expansion of the country westward. Finally, they learn to recognize the major forms of classical music: three-part song form, theme and variations, rondo, sonata allegro, and fugue.

Curriculum Item

Let's Listen CD, Volume 5

Exploring Music

Exploring Music is for students of fifth grade age who are new to the K¹² Music program. This course presents the basics of traditional music appreciation through singing and the study of music in history and culture. Students begin by studying some of the most important classical composers, and then study traditional music from around the country and around the world. Finally, they learn how to follow the form of a piece of music.

Curriculum Items

Let's Listen and Learn, CDs A and B
Let's Sing for Fun CD
Let's Sing for Fun songbook

Music Appreciation

Music Appreciation covers the fundamentals of music (such as rhythm, beat, melody, harmony, form, and expression), and a survey of music history beginning with early music of the Greeks and the Middle Ages. The course concludes with Modern music of composers such as Copland and Prokofiev.

Curriculum Item

- *Music Appreciation* six-CD set

Unit Titles

- The Elements of Music
- Music and Emotion
- Musical Style
- Musical Instruments of the World
- Music Through History

***Please note:** The course is offline, and there are no online lessons. The Teacher and Student Guides are not available in a pre-printed format and will need to be printed from the K¹² Online School (OLS).

Music Concepts A

This traditional music course teaches the fundamentals of music as they relate to the piano key and a study of a select group of composers and their music. Students complete lessons using a *Music Ace* CD-ROM, Student Guides, and listening CDs. Lesson content is not online.



Curriculum Items

- *Music Ace* CD-ROM, Grade 6
- *Beethoven* CD
- *Mendelssohn* CD
- *Mozart* CD
- *Vivaldi & Corelli* CD

Unit Titles

- The Staff and the Keyboard
- Extending the Staff
- Flats, Sharps, and Scales

***Please note:** The Student Guides are not available in a pre-printed format and will need to be printed from the K¹² Online School (OLS). Teacher Guides are not available in any format. Parents may use the Student Guide to view student lesson information.

Music Concepts B

Music Concepts B is the second course in the Music Concepts Series. This is a traditional music course that teaches the fundamentals of music as they relate to the piano key, and studies of a select group of composers and their music. Students complete lessons using the *Music Ace* CD-ROM, Student Guides, and listening CDs. Lesson content is not online.

Curriculum Items

- *Sousa* CD
- *Music Ace* CD-ROM, Grade 7
- *Chopin* CD
- *Schumann & Grieg* CD
- *Verdi* CD

Unit Titles

- The Elements of Rhythm and Melody
- Rhythms, Rests, and Keys
- Minor Scales, Syncopation, and Harmony

***Please note:** The Student Guides are not available in a pre-printed format and will need to be printed from the K¹² Online School (OLS). Teacher Guides are not available in any format. Parents may use the Student Guide to view student lesson information.

World Languages

Elementary Spanish 1

This course for beginners with little exposure to world languages is geared for younger minds, still especially receptive to language learning through contextual interpretation and imitation. Highly visual and amusing stories and activities are geared for these developing students, encouraging them to begin telling stories themselves. This course is not just a set of language lessons, but an appealing adventure for young minds. An integrated, game-based reward system keeps learners motivated and eager to progress.

Communication expressions include greetings, introductions, songs, *por favor* and *gracias*, and other expressions of daily courtesy, simple storytelling, and free-response questions. Vocabulary starts with numbers 1–10, animals, and shapes, and moves into days of the week, seasons, colors, fruits and vegetables, simple directions, and useful “around town” expressions. Grammar moves from simple sentence construction, first- and third-person verbs, and indefinite articles to demonstrative pronouns, simple conjunctions, simple possession, and *ser* and *estar*. Students also begin to encounter the third-person past tense, imperative verbs, and second-person present-tense verbs.

Cultural topics introduce the geography and customs of Spanish-speaking countries.

Curriculum Items

- None

Elementary Spanish 2

The adventure story continues to build upon the base of vocabulary and linguistic structures introduced in Elementary Spanish 1. Interactive activities and increasingly challenging games continue to drive students toward a strong set of intermediate language skills. An integrated, game-based reward system keeps learners motivated and eager to progress.

Communication expressions include social exchanges, more complex storytelling, songs, recipes, word puzzles, and interrogative words. Vocabulary includes advanced family- and animal-related words and a review of numbers. Poems, stories, and songs are used throughout. Grammar moves from negative and reflexive verbs and third-person plural present verbs to noun-adjective agreement, first-person past-tense verbs, and the plural imperative.

Cultural topics include cuisine, climate, geography, and history.

Curriculum Items

• None

Prerequisites: Elementary Spanish 1, or equivalent

Middle School Spanish 1

This course for early- to mid-teen beginners in Spanish* turns adventures and activities into rigorous lessons in grammar and vocabulary, with instruction equivalent to that found in the first semester of high school Spanish I. Listening comprehension, oral production, reading, writing, and cultural awareness are all emphasized in accordance with standards formulated by ACTFL (American Council on the Teaching of Foreign Languages). Communication topics include greetings, introductions, relationships, cause and effect, likes and dislikes, and questions. Vocabulary includes common daily adjectives, animals, body parts, family and household words, colors, food, and numbers 1 to 900. Grammar progresses from simple original sentence construction, verb infinitives, and base forms to irregular verbs, Latin-derived cognates, concrete objects and associated verbs, adjectival agreement, and demonstrative pronouns. Cultural topics include the economies, traditions, histories, and political structures of Spanish-speaking nations.

*Also suitable for students of other ages, depending upon background and experience.

Middle School Spanish 2

The solid basis acquired in Middle School Spanish 1 is expanded through appealing practice and instruction in the form of games and stories, with instruction equivalent to that found in the second semester of high school Spanish I. These activities guide students to express more complex thoughts and understand native language from a variety of culturally authentic sources. Students increase skills in reading, listening comprehension, and vocabulary as they learn sentence patterns and advanced phrases. They learn to identify objects from descriptions, translate to and from Spanish, create stories, and understand and give directions. Vocabulary emphasizes geography, math, plants, animals, and directions, conveyed through increasingly complex poems, stories, and ditties. Grammar topics include object pronouns with finite and infinite verbs, past- and present-tense verbs, action verbs, imperfect tense, participle verb

endings, indicative and subjunctive verb forms, and dependent verb clauses. Cultural topics expand to include higher-level content, with special emphasis on the literary and social treasures of Spanish-speaking countries.

Curriculum Items

• None

Prerequisites: Middle School Spanish 1, or equivalent

Elementary French 1

This course for beginners with little exposure to world languages is geared for younger minds, still especially receptive to language learning through contextual interpretation and imitation. Highly visual and amusing stories and activities are geared for these developing students, encouraging them to begin telling stories themselves. This course is not just a set of language lessons but an appealing adventure for young minds. An integrated, game-based reward system keeps learners motivated and eager to progress.

Communication expressions include greetings, introductions, *oui* and *non*, *s'il vous plaît* and *merci*, and other familiar phrases, songs, simple storytelling, and description activities. Vocabulary starts with animals, shapes, and colors and moves to fruits, farm-related words, body parts, family words, and numbers. Grammar topics include simple nouns, first-, second-, and third-person present-tense verbs for simple questions, basic third-person past-tense verbs, interrogative words, simple conjunctions, articles, prepositions, and introductory imperative and infinitive verb forms.

Cultural topics introduce the geographies and customs of French-speaking countries.

Curriculum Items

• None

Elementary French 2

The adventure story continues to build upon the base of vocabulary and linguistic structures introduced in Elementary French 1. Interactive activities and increasingly challenging games continue to drive students toward a strong set of intermediate language skills. An integrated, game-based reward system keeps learners motivated and eager to progress.



Communication expressions include a wider array of social greetings and more complex storytelling and songs. Vocabulary expands with more terms related to animals, body parts, colors, familial relationships, and numbers. Grammar moves from second- and third-person plural present-tense forms, prepositional phrases, and more first- and third-person present-tense forms to additional conjunctions, reflexive verbs, imperatives, and past-tense forms.

Cultural topics include cuisine, climate, geography, and history.

Curriculum Items

- None

Prerequisites: Elementary French 1, or equivalent

Middle School French 1

This multimedia, game-based course for early- to mid-teen beginners in French* turns adventures and activities into rigorous lessons in grammar and vocabulary, with instruction equivalent to that found in the first semester of high school French I. Listening comprehension, oral production, reading, writing, and cultural awareness are all emphasized in accordance with standards formulated by ACTFL (American Council on the Teaching of Foreign Languages). Communication topics include greetings, introductions, relationships, cause and effect, likes and dislikes, and questions. Vocabulary includes common daily adjectives, animals, body parts, family and household words, colors, food, and numbers 1 to 900. Grammar progresses from simple original sentence construction, verb infinitives, and base forms to irregular verbs, Latin-derived cognates, concrete objects and associated verbs, adjectival agreement, and demonstrative pronouns. Cultural topics include the economies, traditions, histories, and political structures of French-speaking nations.

*Also suitable for students of other ages, depending upon background and experience.

Curriculum Items

- None

Middle School French 2

The solid basis acquired in Middle School French 1 is expanded in this course with instruction equivalent to that found in the second semester of high school French I. Students continue their introduction to French with fundamental building blocks in four key areas of world language study: listening comprehension, speaking, reading, and writing. Students are initially trained to recognize key sounds and basic vocabulary, not only in written form but also through ear training that leads quickly to oral production. An ongoing adventure story introduces vocabulary and grammar topics, and prompts students to use skills from the four language-learning areas. Students learn fundamental grammar as embedded in authentic spoken language.

Curriculum Items

- None

Prerequisites: Middle School French 1, or equivalent

Elementary German 1

This course for beginners with little exposure to world languages is geared for younger minds still especially receptive to language learning through contextual interpretation and imitation. Highly visual and amusing stories and activities are geared for these developing students, encouraging them to begin telling stories themselves. This course is not just a set of language lessons, but an appealing adventure for young minds, rich with graphics, games, and engaging interactive activities. An integrated, game-based reward system keeps learners motivated and eager to progress.

Communication expressions include greetings, introductions, ja and nein, danke and bitte and other familiar phrases, songs, simple storytelling, and description activities. Vocabulary starts with animals, body parts, numbers, shapes, small objects, and colors, before moving on to food, farm-related words, useful “around town” expressions, and household terminology. Grammar starts with simple nouns, first-, second-, and third-person present-tense verbs, direct and indirect articles, the conjunction und, the pluralization of nouns, third-person plural present-tense verbs, third-person past-tense verbs, simple prepositions, and expressions conveying “there is,” “there are,” “isn’t,” and “will be.”

Cultural topics introduce the geographies and customs of German-speaking countries, with a special focus on German-speaking Switzerland.

Curriculum Items

• None

Prerequisites: Elementary German 1, or equivalent

Elementary German 2

The adventure story continues to build upon the base of vocabulary and linguistic structures introduced in Elementary German 1. Interactive activities and increasingly challenging games continue to drive students toward a strong set of intermediate language skills. An integrated, game-based reward system keeps learners motivated and eager to progress.

Communication expressions include a wider array of social greetings, introductions, simple commands, suggestions, questions, German folk songs, and enhanced storytelling. Vocabulary expands in the domains of animals, body parts, numbers, shapes, small objects, familial relationships, food, cooking, and new words useful for telling stories such as “The Three Little Pigs” and “Chicken Little” in German. Grammar adds more third-person present-tense verbs, direct and indirect articles, and the conjunction *aber*, and progresses toward new third-person plural present-tense forms, third-person past-tense verbs, additional prepositions, and expressions conveying “very.” Students are also exposed to the simple future tense in the third person.

Cultural topics include cuisine, climate, geography, and history.

Curriculum Items

• None

Middle School German 1

This course for early- to mid-teen beginners in German* turns adventures and activities into rigorous lessons in grammar and vocabulary, with instruction equivalent to that found in the first semester of high school German I. Students are introduced to the fundamental building blocks in four key areas of world language study: listening comprehension, speaking, reading, and writing. Students are initially trained to recognize key sounds and basic vocabulary, not only in written form but also through ear training that leads quickly

to oral production. An ongoing adventure story introduces vocabulary and grammar topics, and prompts students to use skills from the four language-learning areas. Students learn fundamental grammar as embedded in authentic spoken language.

*Also suitable for students of other ages, depending upon background and experience.

Curriculum Items

• None

Middle School German 2

The solid basis acquired in Middle School German 1 is expanded in this course with instruction equivalent to that found in the second semester of high school German I. In this continuing introduction to German, students deepen their focus on four key skills in world language acquisition: listening comprehension, speaking, reading, and writing. A continuing storyline introduces and reinforces new vocabulary, while activities prompt students to analyze meaning from context, and then to reproduce new vocabulary items in functional real-life oral expression. Additional verb tenses and idiomatic expressions are also introduced. As in German 1, students learn grammar through supplemental texts that supply traditional charts, tables, and explanations.

Curriculum Items

• None

Prerequisites: Middle School German 1, or equivalent

Elementary Latin 1

Latin remains a vital tool in improving students’ fundamental understanding of English and other languages. While being, in the strictest sense, a “dead” language, Latin comes alive in this course through the use of gaming and multimedia techniques, creating the foundation for a deep understanding of cultural, political, and literary history. An integrated, game-based reward system keeps learners motivated and eager to progress.

Communication expressions include greetings, introductions, familiar phrases, relationships, cause and effect, likes and dislikes, and questions. Vocabulary progresses from animals, body parts, family relationships, colors, food, plants, and numbers to small objects, shapes,



and household words. Grammar begins with simple sentence construction, first- and third-person verbs, demonstrative pronouns, conjunctions, and simple possession before moving on to basic third-person past-tense and imperative forms, as well as certain second-person present-tense forms.

Cultural topics introduce the history of the Latin language, and daily practices as well as military, political, and artistic aspects of the Roman Empire.

Curriculum Items

- None

Middle School Latin 1

This course for early- to mid-teen beginners in Latin* transforms a “dead” language into a living one, with instruction equivalent to that found in the first semester of high school Latin I. Students learn the fundamental building blocks of world language study: listening comprehension, speaking, reading, and writing. Each unit consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and cultural presentations covering significant aspects of Roman culture, and assessments. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

*Also suitable for students of other ages, depending upon background and experience

Curriculum Items

- None

Middle School Latin 2

This course for early- to mid-teen beginners in Latin* expands on skills learned in the first-year course, with instruction equivalent to that found in the second semester of high school Latin I. Students continue building the fundamentals: listening comprehension, speaking, reading, and writing. Each unit consists of a new vocabulary theme and grammar concept; numerous interactive games reinforcing vocabulary and grammar; reading and listening comprehension activities; speaking and writing activities; cultural presentations covering significant aspects of Roman

culture; and assessments. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

*Also suitable for students of other ages, depending upon background and experience

Curriculum Items

- None

Prerequisites: Middle School Latin 1, or equivalent

Middle School Chinese 1

Students use compelling stories, games, videos, and multimedia experiences in this introduction to Mandarin Chinese, with instruction equivalent to that found in the first semester of high school Chinese I. They learn the elegant simplicity of Chinese grammar and the subtleties of Chinese pronunciation through entertaining lessons that give a base of conversational ability and listening comprehension. Students build a foundation for reading and writing in the Chinese language through an adaptive technology that lets them choose an approach that works best for them. Engaging graphics, videos, and games keep students interested, and make learning a new language exciting.

Curriculum Items

- None

Middle School Chinese 2

Students use compelling stories, games, videos, and multimedia experiences in this continuing introduction to Mandarin Chinese, with instruction equivalent to that found in the second semester of high school Chinese I. They learn the elegant simplicity of Chinese grammar and the subtleties of Chinese pronunciation through entertaining lessons that give a base of conversational ability and listening comprehension. Students build a foundation for reading and writing in the Chinese language through an adaptive technology that lets them choose an approach that works best for them. Engaging graphics, videos, and games keep students interested, and make learning a new language exciting.

Curriculum Items

- None

Prerequisites: Middle School Chinese 1, or equivalent

Introduction to Online Learning

Families begin the school year with one of three Introduction to Online Learning courses targeted to grades K-2, 3-5, or 6-8. The courses provide an overview of each curriculum area so students and Learning Coaches can familiarize themselves with the philosophy behind the curriculum methodology and overall course organization. The lessons are interactive and include actual animations or graphics that are used in the courses themselves. By the end of the course, students will be fully prepared to begin their K¹² lessons in the online school.

Course Length: 6-8 hours

Materials: None

Prerequisites: None



2300 Corporate Park Drive
Herndon, VA 20171
Toll Free: 866.YOURK12

Copyright © 2011 K12 Inc. All rights reserved. K12, as registered in the U.S. Patent and Trademark Office, and the K¹² Logo and Design, Unleash the xPotential and xPotential are trademarks and service marks of K12 Inc.

K12.COM