



Curriculum Guide

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Graduation Requirements

**(NHP/LAUSD +
Neighboring Districts)**

High School Graduation Requirements

LAUSD (other districts are slightly different)

Each class is one semester long – passing equals 5 credits

Total of at least 210 credits required to graduate

Must pass the following classes:

English 9A

English 9B

English 10A

English 10B

English 11A

English 11B

English 12A

English 12B

Algebra 1A

Algebra 1B

Geometry A

Geometry B

Algebra 2A (with a waiver, can substitute another math class like Consumer Math for Algebra 2)

Algebra 2B

Biology A

Biology B

Physical Science A (Chemistry of Physics)

Physical Science B

World History A

World History B

US History A

US History B

Economics

Government

LOTE 1A (Language Other Than English)

LOTE 1B

LOTE 2A (with waiver, can substitute career classes for LOTE 2)

LOTE 2B

Visual or Performing Art A (Must be same subject: Art, Graphic Arts, Performing Arts)

Visual or Performing Art B

PE 9A

PE 9B

PE 10A

PE 10B (need to pass Fitnessgram or take more PE after 10B until you do!)

Health

Electives x 7



Textbooks

Textbook List



High School

Grade	Subject	Title	ISBN #	Year	Publisher
9	ELA	Collections Teacher's Edition	978-0-544-50339-7	2017	Houghton Mifflin Harcourt
9	ELA	Collections	978-0-544-50330-4	2017	Houghton Mifflin Harcourt
9	ELA	Performance Assessment Teacher's Guide 3	978-0-544-56945-4	2017	Houghton Mifflin Harcourt
9	ELA	Performance Assessment	978-0-544-56936-2	2017	Houghton Mifflin Harcourt
9	ELA	Close Reader	978-0-544-08769-9	2017	Houghton Mifflin Harcourt
9	ELA	Quick Start Pacing Guide	978-0-544-61106-1	2017	Houghton Mifflin Harcourt
9	ELA	Language Workshop Teacher's Guide	978-0-544-94231-8	2017	Houghton Mifflin Harcourt
9	ELA	Language Workshop Resources	978-0-544-94217-2	2017	Houghton Mifflin Harcourt
9	ELA	Language Workshop Assessment Handbook	978-0-544-94235-6	2017	Houghton Mifflin Harcourt
10	ELA	Collections	978-0-544-50331-1	2017	Houghton Mifflin Harcourt
10	ELA	Performance Assessment	978-0-544-56938-6	2017	Houghton Mifflin Harcourt
10	ELA	Performance Assessment Teacher's Guide	978-0-544-56946-1	2017	Houghton Mifflin Harcourt
10	ELA	Close Reader	978-0-544-08762-0	2017	Houghton Mifflin Harcourt
10	ELA	Language Workshop Resources	978-0-544-94228-8	2017	Houghton Mifflin Harcourt
10	ELA	Language Workshop Assessment Handbook	978-0-544-94236-3	2017	Houghton Mifflin Harcourt
10	ELA	Language Workshop Teacher's Guide	978-0-544-94232-5	2017	Houghton Mifflin Harcourt
10	ELA	Quick Start Pacing Guide	978-0-544-60966-2	2017	Houghton Mifflin Harcourt
10	ELA	Collections Teacher's Edition	978-0-544-50340-3	2017	Houghton Mifflin Harcourt
11	ELA	Performance Assessment	978-0-544-56940-9	2017	Houghton Mifflin Harcourt
11	ELA	Close Reader	978-0-544-09119-1	2017	Houghton Mifflin Harcourt
11	ELA	Language Workshop Resources	978-0-544-94229-5	2017	Houghton Mifflin Harcourt
11	ELA	Language Workshop Assessment Handbook	978-0-544-94237-0	2017	Houghton Mifflin Harcourt
11	ELA	Language Workshop Teacher's Guide	978-0-544-94233-2	2017	Houghton Mifflin Harcourt
11	ELA	Quick Start Pacing Guide	978-0-544-61256-3	2017	Houghton Mifflin Harcourt
11	ELA	Performance Assessment Teacher's Guide	978-0-544-56947-8	2017	Houghton Mifflin Harcourt
11	ELA	Collections	978-0-544-50332-8	2017	Houghton Mifflin Harcourt
11	ELA	Collections Teacher's Edition	978-0-544-50341-0	2017	Houghton Mifflin Harcourt
12	ELA	Performance Assessment	978-0-544-56941-6	2017	Houghton Mifflin Harcourt
12	ELA	Performance Assessment Teacher's Guide	978-0-544-56948-5	2017	Houghton Mifflin Harcourt
12	ELA	Close Reader	978-0-544-08841-2	2017	Houghton Mifflin Harcourt

12	ELA	Language Workshop Resources	978-0-544-94230-1	2017	Houghton Mifflin Harcourt
12	ELA	Language Workshop Assessment Handbook	978-0-544-94238-7	2017	Houghton Mifflin Harcourt
12	ELA	Language Workshop Teacher's Guide	978-0-544-94234-9	2017	Houghton Mifflin Harcourt
9/10	Math	Algebra 1	978-1-60840-838-2	2015	Big Ideas Math
10/11	Math	Geometry	978-1-60840-839-9	2015	Big Ideas Math
11/12	Math	Algebra 2	978-1-60840-840-5	2015	Big Ideas Math
	Math	Trigonometry	978-0-13-239279-2	2005	Pearson Prentice Hall
9/10	Science	Biology	978-0132013499	2007	Prentice-Hall
11/12	Science	Conceptual Physics	978-0131663015	2004	Pearson Prentice Hall
11/12	Science	Integrated Coordinated Science	978-1-58591-279-7	2006	It's About Time, Herff Jones Education Division
10	Soc Studies	World History: Modern Times	978-0078678554	2006	Glencoe
11	Soc Studies	American Vision: Modern Times	978-0078678493	2005	Glencoe
12	Soc Studies	US Government	978-0078600531	2005	Glencoe
12	Soc Studies	Economics: Today & Tomorrow	978-0078606960	2007	Glencoe
9/10	Health	Lifetime Health	978-0030962196	2009	Holt
	LOTE	Realidades 1	978-0130360014	2003	Prentice-Hall
	LOTE	Realidades 2	978-0130359513	2004	Prentice-Hall
	LOTE	Realidades 3	978-0130359681	2004	Prentice-Hall
	LOTE	Signing Naturally 1	978-1581211276	1988	Dawn Sign Press
	LOTE	Signing Naturally 2	978-1581211313	1992	Dawn Sign Press
	Elective	Understanding Psychology	0-07-828571-2	2001	Glencoe McGraw Hill
	Elective	World Geography	978-0-618-68998-9	2007	McDougal Littell
	Elective	Street Law	978-0-078-79983-9	2009	McGraw-Hill

Elementary School

Grade	Subject	Title	ISBN #	Year	Publisher
1	MATH	Go Math	978-0-544-20383-9	2015	Houghton Mifflin Harcourt
2	MATH	Go Math	978-0-544-20391-4	2015	Houghton Mifflin Harcourt
3	MATH	Go Math	978-0-544-20397-6	2015	Houghton Mifflin Harcourt
4	MATH	Go Math	978-0-544-20405-8	2015	Houghton Mifflin Harcourt
5	MATH	Go Math	978-0-544-20408-9	2015	Houghton Mifflin Harcourt
1	SCI	California Science	978-0-15-347117-4	2008	Harcourt
2	SCI	California Science	978-0-15-347118-6	2008	Harcourt
3	SCI	California Science	978-0-15-347119-3	2008	Harcourt
4	SCI	California Science	978-0-15-347120-8	2008	Harcourt
5	SCI	California Science	978-0-15-347121-6	2008	Harcourt
1	SS	History – Time and Place	0-328-15488-1	2006	Scott Foresman
2	SS	History – Then and Now	0-328-15495-4	2006	Scott Foresman
3	SS	History - Our California	0-328-16809-2	2006	Scott Foresman
4	SS	History - Our Communities	0-328-16673-1	2006	Scott Foresman
5	SS	History - Our Nation	0-328-16673-1	2006	Scott Foresman
1	ELA	Wonders Literature Anthology 1.1	978-0-02-138919-3	2017	McGraw-Hill Education
1	ELA	Wonders Literature Anthology 1.2	978-0-02-139018-2	2017	McGraw-Hill Education
1	ELA	Wonders Literature Anthology 1.3	978-0-02-144526-4	2017	McGraw-Hill Education
1	ELA	Wonders Literature Anthology 1.4	978-0-02-136908-9	2017	McGraw-Hill Education
1	ELA	Wonders Reading/Writing Workshop 1.1	978-0-07-677063-2	2017	McGraw-Hill Education
1	ELA	Wonders Reading/Writing Workshop 1.2	978-0-07-680007-0	2017	McGraw-Hill Education
1	ELA	Wonders Reading/Writing Workshop 1.3	978-0-07-679764-6	2017	McGraw-Hill Education
1	ELA	Wonders Reading/Writing Workshop 1.4	978-0-07-677113-4	2017	McGraw-Hill Education
1	ELA	Wonders Close Reading Companion 1	978-0-02-130521-6	2017	McGraw-Hill Education
2	ELA	Wonders Literature Anthology	978-0-02-134098-9	2017	McGraw-Hill Education
2	ELA	Wonders Reading/Writing Workshop	978-0-07-678320-5	2017	McGraw-Hill Education
2	ELA	Wonders Close Reading Companion	978-0-02-130599-5	2017	McGraw-Hill Education
3	ELA	Wonders Literature Anthology	978-0-02-134174-0	2017	McGraw-Hill Education
3	ELA	Wonders Reading/Writing Workshop	978-0-07-678411-0	2017	McGraw-Hill Education
3	ELA	Wonders Close Reading Companion	978-0-02-132941-0	2017	McGraw-Hill Education
4	ELA	Wonders Literature Anthology	978-0-02-141737-7	2017	McGraw-Hill Education



Course Descriptions

High School and Middle School Course Descriptions

High School

Art Program

The Art Department's philosophy is based upon the belief that art is essential for the development of the whole person. Art encourages creative thinking, self-expression, originality, emotional release, questioning, and problem solving, as well as an appreciation of the world, past and present. Students learn the elements and principles of design: line, color, pattern, texture, value, shape, movement, contrast, and repetition through a wide variety of media. Slides, films, videos, books, and prints help students to develop a critical and historical appreciation of art. All courses in the Arts address the five components required by the University of California: Artistic Perception, Creative Expression, Historical and Cultural Content, Aesthetic Valuing, and Connection and Applications. All require some work beyond class time.

Art 1A

One Semester

Grades, 9, 10, 11, and 12

This course offers students an introduction to the elements of art and to the principles of design. Students explore various mediums and techniques while learning about the work of past and present artists. Expectations of the course will include weekly artistic submissions, reports on technical aspects of art, and cross-curricular projects.

Art 1B

One Semester

Prerequisite: Art I

Grades, 9, 10, 11, and 12

This course consists of more advanced work and continues on from Art I to include three-dimensional form. The course integrates historical examples as well. Art I is a prerequisite. Weekly submission of sketchbook work will be required, as will museum critiques and a larger project.

Art 2A

One Semester

Prerequisites: Art I and II

Grades, 9, 10, 11, and 12

Art III is a third semester course that gives students a wide range of experiences in drawing, painting, printmaking and mixed media. The students will work with the elements of art and principles of design. They will research and analyze two contemporary artists, and learn about art form diverse cultures. Students will be responsible for required materials. (Pending UC approval)

Art 2B

One Semester

Prerequisites: Art I, II, and III

Grades, 9, 10, 11, and 12

Art IV is a semester course that provides students with the opportunities to produce art projects that demonstrate evidence of intellectual, perceptual, and technical range. The students will continue to learn about the elements of art and principles of design. The students will study organization in drawing and two-dimensional visual design. They will learn about the historical and cultural aspects of art and develop a body of original artworks that reflect a variety of art forms and techniques. Students will be responsible for required materials. (Pending UC approval)

American Cinema AB

One Semester or One Year Class

A survey of a variety of American films – both current and historically – with the aim of helping students understanding complex cultural, psychological, and sociological issues through the medium of video and film.

Photography IAB

Grades 9, 10, 11, 12

Requirements: Digital camera

Photography students learn through hands-on experience how to visualize and process pictures from the camera to the final print. Students will learn how to “see” through assignments designed towards self-expression, articulation and problem solving. Seeing also includes students learning to cut mat’s, mount their work, and install an exhibition. When a project is complete the students hold a critique so they may learn how to evaluate artwork with sensitivity.

Digital Photography AB

Prerequisite: None

Grades 10, 11, 12

Requirements: Digital camera

Students begin with a study of photographic history leading to the innovation of digital capture. They will grow their image making abilities by learning ambient and studio light control, and learn the importance of total scene contrast and exposure control by understanding main and fill light ratios. A full study of photographic tools and vocabulary is detailed and explained including, but not limited to, camera formats, light types, exposure, f-stops, depth-of-field, and the Zone System. Students will have an opportunity to experience hands-on use of a 35mm style digital camera in pursuit of understanding in camera depth of field control. Projects will include form and texture image capture and image manipulation using Photoshop.

Film/Video Editing and Production 1AB, 2AB

One Year Class

Grades 9, 10, 11, 12

Film Production is a course for students who wish to develop and/or further their knowledge of the elements of art and principles of design as they relate to video and film. Students will learn the history of filmmaking and the technological advances that have come about in the art form. Students will learn to use appropriate aesthetic and technical vocabulary. Film will be studied as an art form and as a means of communication. Students will learn to write, storyboard, direct, produce and edit their personal ideas to create finished films. Students will analyze the use of the elements of art and the principles of design as they relate to meaning in video, film or electronic media. Historical and cultural ramifications of digital video in film will be addressed. A variety of films/clips will be viewed and students will analyze and respond to these films, and make critical assessments. Students will learn the entire process of film making from story development, writing a script, pre-production, all elements of production, editing visuals and sound all the way to promoting the film and entering it in film festivals locally and globally. Continuing students will be challenged with advanced projects and higher-level explorations.

Computer Science Program

Today's students need knowledge of the computer, its power, and its limitations in order to enter the work force of tomorrow with the appropriate skills. Every facet of society has become increasingly dependent upon the computer. The computer is no longer the exclusive domain of the engineer and scientist. It has become an essential tool of our society.

Computer Literacy

One semester

Grades 9, 10, 11, 12

The major emphasis of this course is to enable students to develop an awareness of computers, technology, and the Internet. Students will learn computer history, hardware, and software including word processing, publishing, spreadsheets, photo manipulation, and basic web design.

Advanced Computers

One semester

Prerequisite: Computers Literacy

Grades 9, 10, 11, 12

In advanced computers, students will take a more in-depth look at all software packages, HTML, and web design. Students will take an active role in maintaining the NHP Website.

Three Dimensional Computer Animation

One Semester

Prerequisites: Computers I and Web Design

Grades 9, 10, 11, 12

Students learn the fundamentals of 3D graphics and animation design. Projects include the following: creating and editing simple objects, polygonal modeling, surfaces of revolution, lofting curves to create a surface, using the key framer for animation, path animation, skeletons

and kinematics (skins), character animation, rendering a scene, and inverse kinematics. Teacher may change some of these projects based on student abilities and needs.

Yearbook

Grades 10,11,12

Students in Yearbook produce NHP's yearbook. Layout, photography, and copyediting are some of the main areas of responsibility. Student editors are chosen from among students taking the course for the second year and are selected by the teacher on the basis of recommendation and application. Meeting deadlines is a primary task in this class, and grades are based on quality of work, ability to work with a team, and the ability to meet deadlines.

Graphic Arts 1A

Introduction to Digital Arts

Creative use of the computer as a design tool and illustrative medium. Topics include elementary digital techniques as they relate to principles of design, color, composition, and spatial relationships. Students will create a series of illustrations involving freehand and technical drawing, rendering and composition using traditional and digital tools.

Graphic Arts 1B

Fundamentals of Graphic Design 1

An introduction to elements of design, spatial relationships, typography and imagery as they apply to practical visual solutions for self-promotion, resumes, logo design, Web design, and sequential systems. This course instructs the student in graphic design skills employing traditional and digital tools, materials and procedures employed in the communication arts industry. The focus will be on finding creative visual solutions to communication problems using technical skills.

Graphic Arts 2A

Fundamentals of Graphic Design 2

A continuing examination of elements of design, spatial relation relationships, typography and imagery as they apply to practical visual solutions for print and Web applications. Students are introduced to operating procedures in the art department, design studio, and printing plant.

Graphic Arts 2B

Digital Illustration

A "hands-on" course emphasizing traditional illustration skills such as visual problem solving, composition, and drawing while exploring the digital possibilities to execute the artwork. Students spend equal time in the studio working on sketches and concepts for illustration assignments and in the computer lab executing these assignments in digital applications. There will be an opportunity to create illustrations using more than one computer application.

English Program

The English curriculum builds on sequential competency in various rhetorical forms, vocabulary, and reading comprehension. Teachers foster the appreciation of literature and encourage students' individual creativity. Successful students of English come to recognize and to value the artistry of language, and to employ it effectively in speech and writing. Students in their own analytical and creative work acquire control of oral and written expression and evolve their own expressive voices.

English 9AB/10AB

One Year Each

This course consists of three principal elements and selected readings from significant works of world literature. The first element is a review of essential usage and writing skills. The second element is the study of vocabulary and verbal reasoning, using vocabulary from required texts. The third element is an introduction to the criteria used for literary analysis. The readings, which are intended to complement the Ancient and Medieval History curriculum, include a Homeric epic, ancient drama, Arthurian legends, a wide selection of poetry, a Shakespearean play, and at least one modern novel. Individual teachers will differ in teaching methods and literary selections.

In English 10 students hone their writing skills with continued emphasis on literary analysis and the study of vocabulary. A more rigorous examination of the process of producing a formal close reading serves as the foundation of the course's essay writing. Students develop these skills during the critical analysis of representative works of world literature.

English 11AB

American Literature/Contemporary Composition

Full Year

This course is designed to provide students with an English curriculum with a focus on American literature. Students will engage in the careful reading and critical analysis of literary works from a variety of culture. Through the close reading of selected texts, students will examine the ways writers use language to provide both meaning and pleasure for their readers. Students will study literary elements and rhetorical devices as well as literary time periods and examine how they are used in/influence texts. Writing will be an integral part of the course as well. After developing their own ideas about each literary work, students will refine and deepen their insights through class discussion.

English 12AB

World Literature/ Expository Composition

Full Year

The purpose of this course is to examine literature from various cultures around the world. With the media such a pervasive presence in our lives, we have access to more information about the world in which we live than at any other time in history. Many people believe that our focus should be on our membership in the global community rather than in a particular nation, what we have in common, rather than what separates us. The focus in class will be the

themes - truth, justice, the question of identity, fate vs. free will, the individual vs. society, good vs. evil - that are common to the literature of many cultures.

The goal of this course is to help students become confident and effective writers in preparation for their post high school career, learning skills that will benefit their writing across the curriculum. Students will write in a variety of expository modes, such as description, personal narrative, argumentation, comparison-contrast, and film analysis. In addition, this course makes students aware of writing as a process that involves drafting, peer editing, and conscientious revision.

Journalism

One semester

Grades 9, 10, 11, 12

Members of this class are experienced staff writers and new or returning section editors for the school newspaper. In this course, students study interviewing techniques, investigative reporting, news and feature writing, as they hone both peer-editing and self-critiquing skills. The focus of this class is to learn about media, mass communication, and the place that ethical journalism holds in our society. Students continue to write, edit, and produce the paper.

Language Other Than English

At every level the Department promotes interest in the language, culture and peoples of France and French-speaking countries, Latin America, Spain. Mere technical knowledge taught in a cultural vacuum is inadequate for secondary education in foreign languages. Students must also gain an understanding of the contributions and the achievements of these civilizations. Teachers conduct modern language classes in Spanish or French to develop students' ability to understand and respond in these languages. Through the extensive use of tape recorders both in and out of class, students learn to speak and to think spontaneously in the target language, as well as try to enjoy the intellectual challenge of learning another language.

Spanish

Beginning in the first year with little or no knowledge of Spanish, students learn the four language skills of listening, speaking, reading and writing. They acquire the vocabulary, grammar, idioms, and verbal structures necessary for an appropriate level of fluency in the language. Students study Hispanic culture and history and spend additional time working individually with tapes to improve oral/aural skills. Students also spend significant class time doing role-play and cooperative activities that enable them to practice all skills.

Spanish 1AB

Full Year

Grades 9, 10, 11

In this course conversation is generally in present and simple past tenses, and pertains to the basic vocabulary of school, home, and everyday life. Students learn the language through the

use of a main text, workbooks, reading texts, computer practice programs, video programs, and supplementary handouts. Students also study the cultures and geography of Spanish-speaking countries.

Spanish 2AB

Full Year

Grades 9, 10, 11, 12

In this course students learn the remaining verbal tenses, broaden their vocabulary, and supplement their conversational, grammatical, and written skills. They expand their knowledge of Spanish through a continued use of a main text, workbook, handouts, videos, and listening comprehension sources.

Spanish 3AB

Full Year

Grades 10, 11, 12

In this course students refine their understanding of the language and develop a stronger foundation in essential grammatical concepts. The course continues to expand upon a significant repertoire of vocabulary and idiomatic expressions. Students use Spanish in meaningful communicative situations and read unabridged literature.

Mathematics Program

The curriculum in mathematics is designed to prepare students for successful study at the college level through the understanding of mathematical concepts and the acquisition of manipulative skills.

Algebra 1AB

Full Year

Grade 8, 9, 10, 11

This course emphasizes the development of analytical ability to solve word problems. Students learn the skills of mathematical algorithms and operations necessary for solving linear equations, inequalities, simultaneous equations, and quadratic equations. The course covers Cartesian coordinate graphing of linear equations and inequalities, conjunctions, and disjunctions of these sets. Number theory in the course includes extension of the number system to irrational and imaginary numbers with rules of exponents and simplifying. *Algebra I may be spread out over a two-year program for those students who struggle with math.*

Geometry AB

Full Year

Grades 9, 10, 11, 12

This course stresses the development of a system of logic based on deductive reasoning. Students learn definitions and postulates, prove theorems, and build the system of geometry. They also gain the ability to analyze a problem, to hypothesize a conclusion, and then to write a logical, 2-column formal proof. The courses include the study of angle relationships of parallel

and perpendicular lines; similarity and congruence of polygons; circles, arcs, and associated angles; coordinated geometry; area and volume; and constructions.

Algebra 2AB

Full Year

Prerequisite: Algebra I and Geometry

Grades 10, 11, 12

This course is an extension in depth and in breadth of the study of Algebra I. Students learn to solve equations and inequalities by factoring, quadratic formulas, or by synthetic division. Topics include number analysis, operations on polynomials, exponents and roots, analysis of conic sections, and an introduction to logarithmic functions.

Trigonometry/Pre-Calculus AB

Full Year

Prerequisites: Algebra I, Geometry, Algebra II, and Instructor recommendation

Grades 11 and 12

This course covers a comprehensive review of Algebra II during the first ten weeks, but with more challenging exercises and greater depth. Topics in Trigonometry include the properties of the real number system, relations, functions and their graphs, circular and trigonometric functions, exponential and logarithmic functions, as well as real world applications of interest and annuities, polar coordinates and vectors, DeMoivre's theorem, complex numbers, and conic sections. The course follows a functional and graphing approach integrating as many concepts as possible. *Students must purchase a graphing calculator before enrolling in this course.*

Consumer Mathematics AB

Full Year

Prerequisites: Algebra I, Geometry

An introduction to a variety of practical applications using arithmetic, algebra, and geometry, this class is used to substitute for Algebra 2AB when a waiver has been granted by the funding district. Students use math for shopping, calculating interest, calculating taxes, determining costs, and the like.

Physical Education

THG's North Hills Prep believes that physical education serves as an important component in the development of a well-rounded student. The program provides every student with the opportunity to develop and to maintain a level of physical fitness and skill development commensurate with individual needs. This goal is accomplished through the use of drills, tasks, and activities with emphasis on development of basic skills and conditioning. The program also emphasizes teamwork and good sportsmanship among its athletes on competitive teams. The Department promotes good health through proper nutrition and exercise, a knowledge of how the body functions, and an understanding of injury prevention. In addition to team sports, the

program emphasizes individual and recreational sports to help students find lifetime athletic activities.

Physical Education 1AB, 2AB

This course is designed to educate students about the body through various academic and physical activities. Most activities will fall under the following: sport specific, sport specific rules/terminology, physical fitness testing (mandatory for high school diploma), team building, sports etiquette, and recreation.

Science Program

The goals of the Science Program are to develop in students an understanding of the scientific process, to foster an awareness of and an appreciation for the physical and biological world, and to prepare students for college-level courses in science. In addition, the curriculum is designed to develop in students a level of scientific literacy that will enable them to participate as informed citizens in resolving the issues that confront a technologically-oriented society.

Biology AB

Full Year

Grades 9,10,11

These courses are laboratory-oriented introductions to the study of living things from the level of the cell to the relationships of organisms with each other and with the environment. Students consider the cell's process in detail. Students survey the five animal kingdoms and study the physiology, anatomy, genetics, reproduction, development, and ecology of selected organisms. The Honors course will be offered based on number of students eligible for course and covers all the topics of Biology at a more accelerated pace and in greater depth. As this course requires significant additional study, admission is by permission of the department.

Integrated Science AB

Full Year

Prerequisite: Biology

Grades 10, 11, and 12

This laboratory course reinforces existing knowledge of chemistry learned in physical science and introduces new principles and concepts of chemistry. With an emphasis on the inorganic and physical aspects of chemistry, the courses also integrate organic chemistry. Students learn laboratory safety and techniques through extensive experiments, which draw on their skills in critical thinking, writing, and mathematics.

Physics AB

Full Year

Prerequisite: Biology

Grades 11 and 12

In this laboratory course students study the principles and concepts of physical matter and change. The course includes mechanics, thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. The class emphasizes mathematical functions, problem solving, and laboratory investigations as well as practical experience and application of these principles to everyday life.

Social Studies Program

The Social Studies Program is designed to provide students with an understanding of the past and the historical process. Students explore the political, economic, and social developments of world.

Modern World History AB

Full Year

Grade 9, 10

This course begins with a review of the Renaissance and continues with an examination of absolute and Constitutional Monarchies, the Age of Reason, the French Revolution, Industrial Revolution, 19th Century Nationalism, World Wars, and conflicts in the contemporary world. Analytical writing in the form of essays and tests and the development of class discussion skills are critical elements of the course.

United States History AB

Full Year

Grade 11

A survey study of the United States from pre-colonial to modern times, this course emphasizes America's political and economic development. Organizational and evaluative techniques are applied to the strong material base students obtain. Students learn study skills appropriate to the social sciences, particularly those needed to manage a challenging textbook and to succeed on college-modeled exams. Honors class available based on eligibility.

American Government

One Semester

Grade 12

This course examines the reasons for relative political stability in the industrial democracies of Western Europe and examines the struggles for stability faced by the emerging democracies in Eastern Europe and the Russian Federation. Using the most current source material available, students compare political systems, examine economic challenges in a post-communist world, and investigate changing diplomatic and military alliances. This course is a prerequisite to AP Comparative Government and Politics that is offered during the second semester. Honors class available based on eligibility.

Economics

One Semester

Grade 12

This course explores the fundamental concepts of economics and their application in modern American society and business. There are long –term class projects on business formation and financial markets. While the class explores the theoretical issues of supply and demand, and allocation, there is continuing emphasis on the opportunities, problems, and solutions of American businesses and social institutions. Honors class available based on eligibility.

Psychology AB

One Semester or Year Class

This class explores a variety of topics in psychology ranging from psychobiology to personality theory, experimental psychology and psychotherapeutics. In addition, the class looks at various aspects of psychopathology, treatment, and medications.

Consumer Studies AB

One Semester or One Year Class

This class looks at the various aspects of consumer culture and consumer behavior, including trends in fashion and food, spending habits, the youth market, conspicuous consumption, and the psychology of advertising amongst many other topics of interest.

Performing Arts

The curriculum is designed to serve as an introduction to the principles of drama and dance. Students learn effective skills in oral interpretation, critical analysis, acting, and play production. Students also acquire knowledge of the history of drama as an art form, including the various kinds of drama and the major contributing figures. Performing Arts classes address the five components required by the University of California: Artistic Perception, Creative Expression, Historical and Cultural Context, Aesthetic Valuing, and Connections and Applications. All require some work beyond class time.

Performing Arts 1AB, 2AB

One Year Class

Grades 9, 10, 11 and 12

Performing Arts students will learn to demonstrate their ability to solve problems and think critically. Students will achieve this by using sensory information that is communicated through the language of the theater and through the skill of performance. Students will prepare written analyses and critical assessments of various plays through research and problem solving. They will study the historical and theatrical contexts from which the studied plays come. Students will demonstrate their skills through performance and their writing. Assessment comes through the presentation of the genre studied to an audience, plus class critique and self-evaluation. Students achieve self-confidence by successfully acting out the scene or play in front of an audience. Students may also take part in a service learning project designed to bring theater arts to the larger community.

Other

Study Skills AB

One Semester or One Year

Designed to assist students with time and strategies for completing schoolwork.

Life Skills/Transition Planning

A course unique to The Help Group's North Hills Prep, this course is required of all high school and middle school students and surveys a variety of relevant topics including moral and ethical dilemmas, psychology and sociology, current events, environmental issues, personal issues, politics and economics. The course may include specific projects related to student Identity and Ambition.

Middle School

English/Language Arts

English 6AB

The major emphasis of this course is to provide students with a balanced language arts program by providing a variety of historically or culturally significant works of literature organized around themes to promote understanding, discussion and writing skills. Students are taught to ask questions, discuss, research, write about and think about the themes and how they relate to self and the larger community. Students will read and understand grade-level appropriate content area material. They will describe and connect the essential ideas, arguments, and perspectives of the text by using knowledge of text structure, organization, and purpose. Students will continue to use the writing process with an emphasis on purpose and using a variety of effective and coherent organizational patterns. English 6AB meets the Basic English requirement.

English 7AB

The purpose of this course is to provide the opportunity to continue to develop student's reading, comprehension and writing skills. Aligned with the California State Content Standards, students move from the interpretation of a text to meaningful connections between the text and their experiences. English 7AB meets the Basic English requirement.

English 8AB

The major emphasis of this course is to provide students with opportunities to read, think and write about high-quality classic and contemporary literature. Literary concepts and active reading strategies are reinforced. Critical thinking skills are developed throughout the exploration of ideas, attitudes, ideals, and values, as they relate to self and the larger community. Themes include, but are limited to understanding relationships, making discoveries, showing determination, taking chances, science fiction and reading history through American literature. Skills instruction and practice in grammar and writing skills are provided. Students broaden their writing abilities to including autobiographical, narrative, research paper, persuasive composition and summaries of reading materials. English 8AS meets the Basic English requirement for high school graduation.

Mathematics

Mathematics 6AB

This course is designed to help prepare students for Math 7AB, Pre-Algebra and Algebra. The focus of study is on the mastery of the four arithmetic operations with whole numbers, positive fractions, positive decimals, and positive and negative integers. Students develop skill in working with units of measurement, and applying their knowledge of measurement and geometry to help them find the perimeter, areas, and volume of geometric figures.

Mathematics 7AB

This course is designed to prepare students for Algebra. Curriculum includes explorations of algebraic concepts and processes including variables, expressions and equations, graphs and tables, linear equations, in equalities and nonlinear equations and application of algebraic methods to solve a variety of real-world and mathematical problems,

Mathematics 8AB

The focus of the course is algebra. The course will teach the standard algebra course while also building basic arithmetic skills and problem solving. This class meets proficiency standards for high school graduation. Students continue to develop conceptual understanding of standards based Algebra 1. This class meets proficiency standards for high school graduation.

Social Studies

Ancient Civilizations 6AB

Students in grade 6 learn about people and events that lead to the major Western and non-Western civilizations. Course of study includes the early humans and the development of human societies, the beginnings of civilizations in the Near East and Africa, the foundation of western ideas through the study of the ancient Hebrews and Greeks, and the development of the early civilizations of India, China, and Rome. Students at North Hills Prep School are engaged in higher levels of critical thinking by considering why civilizations developed where they did, why they became dominant, and why they declined.

Medieval and Early Modern Times 7AB

Students in grade 7 study the social, cultural and technological changes that occurred in Europe, Africa and Asia in the years A.D. 500-1798. After reviewing the ancient worked and the ways in which archeologists and historians work as detectives by formulating appropriate questions and drawing conclusions from evident, students study the history and geography of the civilizations of Islam, China, Ghana and Mali, Medieval Japan and Europe. Students study the Mayan, Aztecs, and Incan civilizations of Meso-America. Finally, they analyze the historical developments of the Renaissance, the Reformation, and the Scientific Revolution and the political and economic changes brought about by the Age of Exploration, the Enlightenment, and the Age of Reason.

U.S. History: Growth and Conflict 8AB

This course focuses on the growth of the United States during the period of colonization to the Age of Industrialization. Topics include in-depth study of the major ideas, issues, and events preceding the founding of the nation, the constitution and the development of the U.S. government, the growth and expansion of the U.S., the causes and consequences of the Civil

War, the Industrial Revolution, immigration and the experiences of diverse groups and their contributions to the evolving American identity, and the transformation of the American economy and contemporary social and economic conditions.

Science

Earth Science AB

Students at North Hills Prep School are actively engaged in learning through direct instruction, participating in labs, and focusing on reading for understanding. Topics covered in this course include the earth systems and processes, plate tectonics and the earth's structure, weather and climate, ecology and resources, Technology supports student learning through a wide range of tools. Transparencies, audio, video, CD-ROMS, interactive textbooks, and the Internet are used to reach all types of learners. Students are provided hands-on learning and Lab activities through use of DVDs.

Life Science 7AB

A rich assortment of hands-on activities to provide numerous opportunities for investigations, inquiry, and experimentation. Content includes cell biology, genetics, evolution, earth and life history, structure and function in living organisms, and physical principles in living systems. Technology supports student learning through a wide range of tools. Transparencies, audio, video, CD-ROMS, interactive textbooks, and the Internet are used to reach all types of learners. Students are provided hands-on learning and Lab activities through use of DVDs.

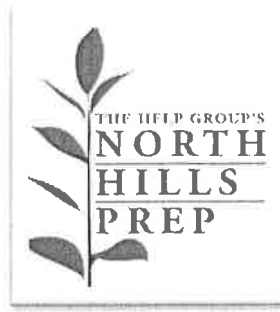
Physical Science 8AB

This course is designed to provide access to the content through direct instruction and meaningful hands-on activities. The course covers motion, forces, structure of matter, the earth in the solar system, chemical reactions of living systems, the periodic table and density and buoyancy. Technology supports student learning through a wide range of tools. Transparencies, audio, video, CD-ROMS, interactive textbooks, and the Internet are used to reach all types of learners. Students are provided hands-on learning and Lab activities through use of DVDs.



Lower School

Grade-by-Grade Curriculum and Expectations



Grade 1

Books

Mathematics: Go Math 1

English: Wonders 1

Science: California Interactive Science 1

Self-Management

Sit in a chair for a longer period of time

Work independently at desk

Listen to and follow directions

Read directions off the board

Complete homework and bring it back the next day

Social-Emotional

Respect authority

Respect peers

Be able to see things from another person's point of view

Greater reasoning and empathy

Problem-solve disagreements

Work out problems with peers

Cognitive

Distinguish left from right

Be able to plan ahead

English

Write words with letter-combination patterns such as words with a silent *e*

Read and write high-frequency words such as *where* and *every*

Write complete sentences with correct capitalization and punctuation

Read aloud first-grade books with accuracy and understanding

Math

Count change

Tell time to the hour and half-hour

Quickly answer addition and subtraction facts for sums up to 20

Complete two-digit addition and subtraction problems without regrouping

What Students Learn in First Grade

The Basics

First grade marks an important milestone for young children who finally feel like part of a “big” school. They may eat in the cafeteria for the first time or play outside during recess without the direct supervision of their own teacher, experiences that help first graders feel more independent. First graders now have to use the social skills they developed in preschool and kindergarten in more mature ways. But the true magic of first grade happens as children develop the ability to understand what letters and numbers really mean. When they’re ready, they’ll be able to “crack the code” and read words.

Language & Literacy

First grade is traditionally thought of as the level where children learn to read. Not all children become fluent readers by the end of the first grade, but most take their first solid steps toward fluid reading. Their reading material varies from simple rhymes, to classroom news, to patterned stories and beginner non-fiction books. By the end of the year, most are reading grade-level chapter books and some are reading at even more advanced levels. First graders love true stories of long ago, even though their sense of time isn’t well developed. Some good historical books include “The Man Who Walked Between Two Towers” by Mordicai Gerstein, “My Brother Martin” by Christine King, and “The Story of Ruby Bridges” by Robert Coles.

First-grade teachers help children listen for sounds in words, write the sounds they hear, and discover parts of written language, like the –at in cat that they can then use to figure out the words hat, mat, and sat.

Writing, like reading, takes a variety of forms in the first-grade classroom. Children “invent” their spellings as they work out their understandings of written language. Writing activities include journal writing, writing creative stories, or documenting their work in other subject areas. Teachers frequently ask children to sound out the words they write to introduce the sounds that letters make.

Math

First graders begin to grasp more abstract mathematical concepts. Children are introduced to time, money, and the meaning of numbers greater than those they can count. Because first graders still learn best by working with physical objects, teachers give children materials to use during math lessons such as number cubes, pattern blocks, and color rods.

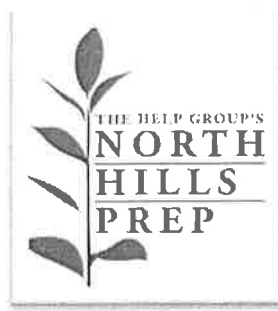
First graders start to do simple addition and subtraction problems. They learn to count by 2s, 5s, and 10s, which will help them later when doing math equations. They also work with 2- and 3-dimensional geometric shapes.

Science

Teachers encourage first graders to find their own answers to questions about the natural world, and to learn to find patterns in that world. They may be introduced to concepts that require them to understand more than they can explore concretely, such as living things being made up of small parts. Common science explorations include water and weather, the parts of the human body, and identifying characteristics of plants and animals. Children may also experiment with motion and with how pushing and pulling affects an object.

Social Studies

First-grade social studies is framed by the concrete world of family, school, and neighborhood. First graders can tell the difference between events that happen in the past, present, and future, although they are not ready to match real meanings to different time intervals. Events that happened 20 years ago and 100 years ago are all part of the same “past” time period to a first grader, unless they’re related to things that children are familiar with, like “That was when your grandmother was a baby.”



Grade 2

Books

Mathematics: Go Math 2

English: Wonders 2

Science: California Interactive Science 2

Social Studies: Then and Now

Cognitive

Make connections between concepts

Compare and contrast ideas

Begin to reason and concentrate

Improve his ability to process information

Social-Emotional

Work cooperatively with a partner or small group

Moral

Understand the difference between right and wrong

English

Expand vocabulary

Read fluently with expression

Recognize most irregularly spelled words such as because and upon

Begin to use a dictionary

Math

Add single- and multi-digit numbers with regrouping

Tell time to the quarter-hour

Know the concept of multiplication (for example, 2×3 is two rows of three)

What Students Learn in Second Grade

The Basics

In second grade most children practice the skills learned in earlier grades and begin to use them with ease. Some children who were not completely ready to understand all the material introduced in first grade may now be ready to master it. Second graders apply what they learned about the meanings of letters and numbers to more complicated material, and begin to develop their analytical abilities even further.

Language & Literacy

By second grade, most students can read and write at a basic level. They tackle more and more texts in and out of the classroom as they work to become rapid and accurate readers.

Second-grade teachers put an emphasis on fluent reading (reading without stopping to figure out words) at each child's own level. The more fluent children become at one level, the more likely they are to become fluent at the next. Children need to be able to read words at each level effortlessly before they'll really comprehend what they read.

At this stage children also become better story writers as they learn to write basic sentences and short narratives about an event or a character. Children's handwriting often becomes smaller and neater, and the cursive alphabet may be introduced. Second graders may experiment with different voices, writing some stories from a personal viewpoint, and others in the third person. They more frequently use the correct spelling of words that they know, and use punctuation more regularly.

Math

Mathematics concepts become more complex in second grade. Children can order, group numbers, and work with numbers far greater than those they can physically count. They'll have more practice with skills and concepts introduced in first grade, such as skip counting. They'll learn to add and subtract two-digit numbers, and to understand the meaning of multiplication and division. Many teachers will introduce the first half of the "times table" up to the number five.

Science

Second graders will be asked to use what they know to make predictions and find patterns in the natural world. They learn about the Earth and its natural resources, and how people use these resources to get energy. They look at how the Earth changes over time and how we learn about the history of the Earth through fossils. They may do a deeper study of the life cycles of plants and animals.

Social Studies

In second grade, children broaden their knowledge of the world. Students learn about the people and places of their local communities and regions, and compare them to other communities and regions.



Grade 3

Books

Mathematics: Go Math 3

English: Wonders 3

Science: California Interactive Science 3

Social Studies: Our Communities

Cognitive

Become more organized and logical in her thinking processes

Be able to copy from a chalkboard

Self-Management

Be helpful, cheerful, and pleasant as well as rude, bossy, selfish, and impatient

Social-Emotional

Build stronger friendships

Be more influenced by peer pressure because friends are very important at this stage

Work cooperatively and productively with others in small groups to complete projects

Moral

Like immediate rewards for behavior

Understand how choices affect consequences

English

Be able to write neatly in cursive because the small muscles of the hand have developed

Read longer stories and chapter books with expression and comprehension

Use prefixes, suffixes, and root words and other strategies to identify unfamiliar words

Math

Multiply single- and multi-digit numbers

Divide multi-digit numbers by one-digit numbers

Tell time to the half-hour and quarter-hour and to five minutes and one minute

What Kids Learn in Third Grade

The Basics

In third grade, children start putting the learning pieces together to take on more complicated assignments. As they continue to apply the basic skills they learned in first and second grade, they begin to do some work independently rather than with the explicit directions given in earlier grade levels.

The third-grade curriculum focuses on learning about the past, present, and future. Literature, social studies and even science follow events over time, such as observing the phases of the moon or how rocks erode into sand.

Language & Literacy

Third graders learn what it takes to be a good reader. They have a better handle on what to do when they don't understand a word or passage, like looking at pictures in a book for clues. They'll often discuss books in small groups and ask questions about what they're reading. They'll summarize and use graphs to organize their thoughts about the books they read. Their teacher will introduce many literary genres and a variety of print forms, such as newspapers, magazines, and Web sites.

Third graders also learn organizational methods that help them prepare for more complex writing assignments. They'll create maps, webs, and Venn diagrams (diagrams used to compare and contrast two things) to plan their work. They'll write reports, creative fiction, and personal narratives. They'll also be asked to take more responsibility for the writing process, including revising, editing, and proofreading.

Math

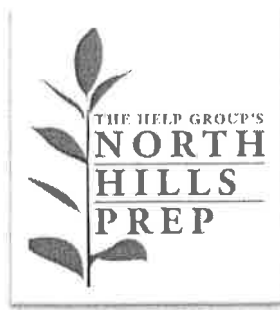
Math becomes much more challenging in third grade. Students work with larger whole numbers (numbers like 3,000) and with fractions and decimal numbers. They'll look at odd and even numbers, and patterns that involve those numbers. They'll solve and explain addition, subtraction, multiplication, and division problems. Students are asked to do more math work on paper and in their heads, instead of with physical materials.

Science

Science investigations become much more detailed in third grade. Students explore more complex natural systems, such as relationships between the sun, Earth, and moon, weather concepts, and living systems like the food chain. They'll learn about landmasses and bodies of water, and how to identify them on a globe or map. They'll begin to investigate different states of matter such as solids, liquids, and gases, and to observe the behaviors of sound and light. They'll be asked to make smart guesses about their observations.

Social Studies

Third grade social studies lessons begin to expand children's view of the world. Students learn about the natural environment and how groups of people have adapted to or modified the environment. They'll study how methods of travel and communication have changed throughout time, and in different regions.



Grade 4

Books

Mathematics: Go Math 4

English: Wonders 4

Science: California Interactive Science 4

Social Studies: Our California

Cognitive

Begin to make more decisions and engage in group decision-making

Be able to memorize and recite facts, although he may not have a deep understanding of them

Increase the amount of detail in drawings

Work on research projects

Understand cause-and-effect relationships

Think independently and critically

Social-Emotional

Want to be part of a group

Have empathy

Moral

Show a strong sense of responsibility

Have a greater awareness of fairness

English

Write a structured paragraph with an introductory topic sentence, three supporting details, and a closing sentence that wraps up the main idea of the paragraph

Use a range of strategies when drawing meaning from text, such as prediction, connections, and inference

Math

Add and subtract decimals, and compare decimals and fractions

Multiply multi-digit numbers by two-digit numbers

Divide larger multi-digit numbers by one-digit numbers

Find the area of two-dimensional shapes

What Students Learn in Fourth Grade

The Basics

In fourth grade children take on new types of work and social experiences, and for some, these can be tough. Fourth graders may struggle to follow the many directions and long-range planning that their school assignments require. They have to collaborate with their peers on group projects, which can be stressful in the charged social dynamics that emerge in fourth grade. Students will probably have a textbook for each subject, as well as multiple folders, all of which can present organizational challenges (plus heavy backpacks). The work gets harder and they need to manage it more independently — that includes homework assignments in multiple subjects, as well as keeping track of those assignments and tasks.

Language & Literacy

Books, books, and more books fill the curriculum as fourth graders become sophisticated readers. They can use root words (words that are the basis for other words, such as “act” in “action”), context clues (looking for clues in the surrounding text and images in the story), and word endings to figure out new words. They’ll spend long periods of time reading and writing on their own. Teachers introduce genres such as myths and legends, fantasy and adventure. Fourth graders relate characters and other story elements to their own lives, and empathize with the characters most like them.

Fourth graders begin to use research tools, such as a dictionary, encyclopedia, library and the Internet, to gather information independently on a topic. Most importantly, they start to learn to organize this information into paragraphs, essays, projects, and presentations that help students synthesize their learning — although their work is appropriately far from “perfect.” They develop a writing style where their personality comes through as well as skills to help them edit their work.

Math

Fourth graders read, write, compare, add, subtract, multiply, and divide with very large whole numbers. They do more equations with fractions and decimals and learn about prime numbers (numbers that can only be divided by themselves and 1). They solve problems about factors (one of two or more numbers that can be multiplied) and multiples (a number that can be divided exactly by a smaller number) and explore geometry formulas for determining perimeter and area, and for measuring angles. Fourth graders figure out conversion problems, such as determining the number of minutes in an hour, or ounces in a pound. They not only read graphs, tables, and charts but should be able to create them from data they’ve collected.

Science

Fourth graders begin to compare complex systems in a complex manner. This can mean looking at changes in the Earth over long periods of time, observing the water cycle, or understanding the interactions between organisms and their environment. Students work on projects that ask them to build hypotheses and make predictions. Science topics may include matter and its different states, forms of energy, and the solar system.

Social Studies

Fourth grade social studies typically moves from learning about the local community to the history of the students’ home state. Students will learn about the first people to live in the area, explore changes in state populations over time, and how different people and cultures have adapted to and influenced the state. They’ll learn to place major events in the state’s history in chronological order. Local and state

government structure will be introduced, and students will learn about the government offices responsible for making, enforcing, and interpreting state laws.



Grade 5

Books

Mathematics: Go Math 5

English: Wonders 5

Science: California Interactive Science 5

Social Studies: Our Nation

Cognitive

Improve problem-solving skills

Acquire more-advanced listening and responding skills

Enjoy organizing and classifying objects and ideas

Social-Emotional

Develop increasing independence

Moral

Be generally truthful and dependable

English

Be able to read and concentrate for long periods of time

Read complex text fluently and with good comprehension

Research a topic using a variety of sources, and use the features of a book (for example, the index, glossary, and appendix) to find information

Identify conflict, climax, and resolution in a story

Write an organized, multi-paragraph composition in sequential order with a central idea

Math

Use problem-solving strategies to solve real-world math problems

Add and subtract fractions and decimals

Identify and describe three-dimensional shapes, and find their volumes and surface areas

Use long division to divide large numbers by multi-digit numbers

What Students Learn in Fifth Grade

The Basics

Fifth graders work hard on projects and tasks that require them to draw on the skills and strategies they have been learning in elementary school. School work gets more difficult, as students may have separate teachers for each subject for the first time. Teachers challenge students with long-term projects that require planning and organization.

The social life of fifth graders often overshadows what they learn — at least for them. Who their friends are and what they think is more important than ever as puberty begins to bloom. At the same time, fifth graders may experience excitement about what they are learning and able to do, as well as new anxiety. In many schools, fifth graders will soon be moving on to middle school, and children may feel both thrilled and overwhelmed by the transition. Parents, guardians and teachers can play a critical role in listening, reassuring and supporting the new individual that is starting to emerge.

Language & Literacy

Fifth graders are asked to read a lot in a variety of subject areas. They'll learn to analyze characters, plot, and settings, as well as to recognize an author's purpose for writing and his organizational strategies. By reading all the time in their classrooms, in libraries, and at home, they'll be able to find what they like to read. Reading for pleasure helps students build their vocabulary and fosters a lifelong love of literature. (Soon, their opportunities for independent reading will be swallowed up by the wealth of middle and high school reading assignments and peer activities.)

Fifth graders have become skillful writers with their own individual styles. They produce and present research projects, and write more complex narratives and creative fiction. They are asked to edit their writing, using what they have learned about the rules of grammar, spelling and punctuation. As in reading, they should be encouraged to explore writing for personal expression, putting their often intense feelings onto paper through poetry, stories, and song writing.

Math

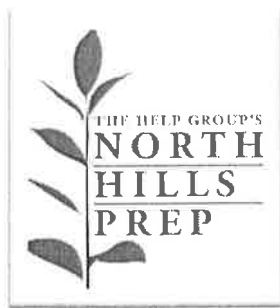
Fifth graders learn to solve complex problems with complex numbers. They divide whole numbers, with and without remainders. They make connections between decimals, fractions, and percentages. They learn to multiply and divide fractions and to do the same operations using the powers of time. They apply these skills to the real world by solving problems about time, measurement, and money.

Science

Fifth graders are now accomplished scientists who can observe and experiment to gather data and draw conclusions. They have expanded their knowledge of the physical world and can apply the basic math and science skills they've acquired to their observations. They learn about the processes of living things, like photosynthesis and digestion. They look at the Earth and its resources, and how people use and affect those resources. Some might experiment with simple chemical reactions. Topics may include Earth's atmosphere and weather, the solar system, and classifying matter.

Social Studies

Fifth graders learn about the people and events of early American history. They compare Native American and colonial experiences with present-day life, focusing on the differing cultures of each original colony. They learn why people moved to the United States and explore the routes and consequences of those movements.



Grade 6

Books

Mathematics: Big Ideas 6

English: Collections 6

Science: California Earth Science

Social Studies: Ancient Civilizations

Overview of 6th Grade

In their first year of middle school, 6th graders embark on a new journey in their schooling, and with that come new challenges and changes. In many ways, 6th grade is a year of significant transition for students as they use the skills they have previously learned and apply them to more complex and independent learning in deeper and more rigorous ways.

.While collaboration and group work may still be an important part of the curriculum, students are often required to produce more extensive independent work, specifically in writing, as they will write formal essays for both Social Studies and English class. This calls for greater independence and organizational skills, and it may certainly require some adjustment and practice in the beginning of the school year. Some may need the whole year to adjust, and that's alright — even this one change can be a major one for middle-schoolers. In addition, students in middle school often transition from being the oldest kids in school to the youngest. (Although this certainly doesn't apply to all middle schools, as some begin in 5th grade and others in 7th). Again, this one fact may require a big adjustment as 6th graders interact with and are perceived differently by the other students in the school.

6th Grade Reading

The ultimate goal of the 6th grade reading curriculum is for students to read increasingly complex texts over the course of the year, preparing them for high school, college, and careers beyond. Students read a variety of texts and different genres, including fiction, drama, poetry, and non-fiction. There is a specific emphasis on and increase in the reading of non-fiction texts in order to prepare students to read, write, and research across subjects. As students read more complex texts, analyzing and understanding them in deeper ways, they strengthen their knowledge of all subjects, including science and history.

In order to build reading skills, your 6th grader:

- Uses evidence from the text in order to summarize the plot, make inferences about and analyze the text, and determine the central theme or themes in a text.
- Understands and explains the point of view in a text; understands the significance of certain words and passages in a text.
- Understands and relays the main thesis or claims of a non-fiction text and its supporting evidence.
- Reads and compares different texts and genres that address the same topics.
- Uses a variety of media and formats, including video and audio, to further enhance understanding of a topic or text.
- Participates in class-wide and group discussions expressing the ideas and skills learned.
- Practices a variety of vocabulary skills, including using the context in which a word is found to determine the meaning of words, recognizing roots of words, and using digital and physical reference materials (dictionaries, thesauruses, and glossaries).
- Gains an understanding of and the ability to explain figurative language in a text.

6th Grade Writing

In middle school, 6th graders are encouraged to push themselves further in their writing and write with increased complexity in terms of length, subject matter, vocabulary, and general writing techniques. At the same time, 6th graders practice and refine many of the skills previously taught to them while enhancing them with the new skills and techniques they learn.

In order to build writing skills, your 6th grader:

- Writes using more complex vocabulary and about more complex content.
- Writes over extended periods of time, such as when writing long-term research or expressive pieces that may take a week.
- Writes for short amounts of times, such as in one sitting.
- Writes a variety of genres for a variety of audiences.
- Writes structured and well-organized opinion, research, and informative pieces that:
 - Use supporting claims and evidence based on credible texts and resources.
 - Include an introduction, a conclusion, and transitions.
 - Integrate other forms of media and formats, such as graphs, charts, headings, audio, or video when appropriate.
- Writes well-structured narratives (both true and fiction) that include:
 - Descriptive detail of characters, settings, and experiences.
 - Dialogue.
 - A clear structure, with a logical order and flow, thought-out word choice, and a conclusion.
- Plans, revises, and edits writing, with guidance from teachers and peers.
- Writes pieces that display the reading skills achieved, including analysis of text, making comparisons and claims, and developing arguments using specific evidence.
- Uses technology and the Internet to produce and publish writing, work with others, and type a minimum of three pages in one sitting.

6th Grade Math

Math in 6th grade focuses on the following areas: ratios and solving equations using ratios; division of fractions; statistical thinking; and working with negative and rational numbers. Students in middle school continue to deepen their understanding of mathematical concepts and explain how they solve equations through writing and discussions.

In order to build math skills, your 6th grader:

- Divides fractions by fractions.
- Solves equations using ratios, rates, or percentages.
- Solves equations with negative numbers.
- Multiplies and divides multi-digit numbers.
- Finds common factors and multiples.
- Understands and talks about ratios using mathematical language. For example, the ratio of girls to boys in the class is 2:3.
- Solves algebraic equations with one variable and explains how these equations were solved.
- Solves geometry problems related to surface area, area, and volume as applied to real-world situations.
- Develops skills in statistical analysis and applies statistical concepts, including mean, median, variability, and range.
- Analyzes mathematical data, thinking about how data was collected and looking at patterns, including clusters, peaks, gaps, and symmetry.
- Explains the process used and the thinking behind how problems and equations are solved.

6th Grade Science

Neither the Common Core nor National Standards breaks down expectations for middle school by grade. Instead, both institutions specify standards for middle school as a whole. Below is a list of skills covered throughout middle school. Consult your child's teacher for more specifics pertaining to the topics and skills covered in her science class.

In middle school, students continue to deepen their knowledge and skills in the physical, life, earth, and space sciences. There is a specific focus on explaining and understanding real-life events and processes in relation to the concepts and topics learned. 6th-8th graders also focus on applying scientific methods as described below in order to deepen their understanding and work like actual scientists.

In order to build science skills, your 6th-8th grader:

- Plans and conducts investigations and experiments.
- Applies the scientific method in order to practice like a scientist (there are many different ways people present "the scientific method," but here's a basic example):
 - Questions, observes, and researches.
 - Develops a hypothesis (based on observations and research).
 - Make predictions.
 - Experiments and follows multi-step processes and instructions in order to conduct experiments.
 - Develops a conclusion.
 - Compares the results of an experiment to what is written about the topic in a text.

- Analyzes and interprets data.
- Uses measurement and mathematical computations while working with data.
- Develops and presents explanations for processes and practices used and results obtained.
- Determines the main ideas of a scientific text and cites specific evidence to support ideas and claims about scientific texts.
- Learns topic-specific science vocabulary.
- Analyzes relevant charts, diagrams, and graphs about a scientific topic.

6th Grade Social Studies

The Common Core does not address the specific topics to be covered in 6th grade; instead, it specifies the set skills to be covered in middle school. The grades in which these skills are covered and which topics are included vary according to different states' standards. Consult your child's school or state standards for further details on the specific material your child will study. The following skills have been set forth as essential for social studies and history in middle school.

In order to build social studies skills, your middle school student:

- Reads primary and secondary sources in order to:
 - Analyze the texts using evidence.
 - Understand the main ideas of the text.
 - Relate the texts to important historical events or concepts.
- Distinguishes between fact and opinion in a text.
- Uses technology and media to better understand concepts taught.
- Compares primary and secondary sources about the same topic.
- Learns about historical events within a context and as related to things such as geography, economy, and social and political factors.
- Learns about topics like ancient and global civilizations to gain a deeper understanding of history and the present global community.



Grade 7

Books

Mathematics: Big Ideas Math 7

English: Collections 7

Science: California Life Science

Social Studies: Medieval and early Modern Times

Overview of 7th Grade

7th graders are able to focus more on growing the skills they began to develop in the 6th grade without the added stress to adjusting to the new middle school environment. By 7th grade it is expected that students have acclimated to life as a middle school student and are therefore expected to work more independently and organize their time and schedules with less (but still some) guidance. In general, in 7th grade, students build on the skills they learned in 6th grade by writing and reading more complex and longer texts and essays, using more sophisticated language and strategies in their writing, studying more complex topics across all subjects, and solving and studying more complex mathematical and scientific concepts. In addition they are pushed to deepen their analytic skills in both ELA and Social Studies as described below. This work will prepare them for 8th grade where they will cement and further their skills, ultimately setting them up for success in high school.

7th Grade Reading

In 7th grade, students deepen their ability to analyze the texts they read and provide evidence from the text to do so. Specifically, 7th graders learn to examine texts more closely and use details from the text in order to develop ideas, analyze, and make inferences. In addition, they analyze the relationships between elements within one text and across multiple texts while supporting this analysis by citing evidence from the text.

In order to build reading skills your 7th grader:

- Analyzes texts using the text as evidence to support the analysis.
- Makes inferences about texts and uses evidence from the text to support the inferences.
- Understands the message or ideas in a text and uses evidence to support these claims.
- Understands, tracks the progress of, and summarizes the main idea of a text, using evidence from the text.
- Analyzes and explains the relationship between different elements such as character and setting.

- Analyzes the impact of specific language and word choice used in a text.
- Understands how the different structures used in a text, such as poetry or drama, affect the text.
- Compares and contrasts the different perspectives and points of views in a text.
- Determines the author's point of view in a text using evidence from the text.
- Compares different versions such as a stage version, film, or audio version of a text, paying specific attention to the way in which elements such as lighting, scenery, or audio sounds affect the message of the text.
- Compares a historical account of an event, person, or place with a historical fiction text about the same period.
- Read a variety of texts, including stories, poetry, drama, non-fiction, or informative texts.
- Compares multiple texts written by different authors about the same topic and determines how their different perspectives are presented through their presentation of facts and the inferences they make.

7th Grade Writing

Similar to the work they do in reading, 7th graders deepen their writing skills by using analysis, paying close attention to detail and providing reasons, proofs, and examples for the ideas they express. 7th graders write a variety of genres, including informative pieces, opinion pieces, and narratives and they complete both short-term and long-term writing assignments. There is also particular attention paid to research and teaching students to do their own independent research and research projects as described below, specifically through the use of digital resources.

In order to build writing skills, your 7th grader:

- Writes arguments that present clear reasons and relevant evidence and include:
 - Introductions;
 - Acknowledgements of opposing claims;
 - Logical and orderly presentations of reasons and evidence;
 - The use of appropriate transitions, words, and phrases to connect claims;
 - A concluding sentence or paragraph which supports the argument made; and
 - A formal tone and style.
- Writes structured and well organized opinion, research, and informative pieces that:
 - Use supporting claims and evidence that are based on credible texts and resources;
 - Include an introduction that has an explanation of what follows;
 - Develop topics through the use of facts, detailed quotations, and examples and subject specific terms and definitions;
 - Include transitions that connect concepts and paragraphs;
 - Include a conclusion that supports the presented idea(s);
 - Maintain a formal "essay type" style; and
 - Integrate other forms of media and formats, such as graphs, charts, headings, and audio or video when appropriate.
- Writes well-structured narratives (both true and fiction) that include:
 - A narrator, characters, and a point of view;
 - Descriptive detail and sensory language to describe characters, settings, and experiences;
 - Dialogue details and descriptions of characters, setting, and experiences;
 - A clear structure with a logical order and flow, as shown through the use of transition words; and

- A conclusion that is connected to and builds on the narrative.
- Plans, revises, and edits writing, specifically with guidance from teachers and peers, focusing specifically on trying new approaches and making sure the writing has a purpose and appeals to its audience.
- Uses technology and the Internet to produce and publish writing.
- Works with others and cites sources.
- Works on multiple, short research projects that answer a specific question and cite multiple sources, while gathering additional questions for later research.
- Uses both print and digital resources to conduct research, focusing on using appropriate search terms and reliable sources.
- Uses quotes and a standard format for citation.
- Uses research to analyze and make inferences.

7th Grade Math

In 7th grade, students focus on proportions and proportional relationships; solving linear equations (equations with variables that plot a straight line on a graph) and equations with rational numbers (integers and fractions); finding the area, surface area, and volume of 2- and 3-dimensional shapes; and analyzing data to make inferences. Students also solve more complex, multi-step equations as well as apply them to real-life applications and solve equations that use rational numbers and which include negative numbers.

In order to build math skills, your 7th grader:

- Solves equations using percentages that pertain to real-life examples, such as discounts, taxes, interest, and tips.
- Graphs different proportions in order to compare them and analyze the steepness of the line that is graphed (which is referred to as the “slope”).
- Uses equations to show the relationship between proportions.
- Understands equations related to the distance between positive and negative numbers and negative and negative numbers.
- Understands that a positive and negative number can equal 0. For example, $2 + -2 = 0$.
- Adds, subtracts, multiplies, and divides negative numbers.
- Analyzes scale drawings (drawings that represent real-life objects, such as cars or buildings and their measurements) in order to solve equations about them.
- Understands that an increase by 5 percent is the same thing as multiplying that number by 0.05.
- Solves multi-step equations that include different forms of numbers, such as fractions, decimals, and percentages.
- Uses statistics specifically to understand and infer information about a group or sample as well as compare 2 different groups or samples.
- Graphs statistics and uses the graph to further analyze a group(s) or sample(s).
- Predicts the probability of something based on collected data.

6th-8th Grade Science

Neither the Common Core nor National Standards breaks down expectations for middle school by grade. Instead, both institutions specify standards for middle school as a whole. Below is a list of skills covered throughout middle school. Consult your child’s teacher for more specifics pertaining to the topics and skills covered in her science class.

In middle school, students continue to deepen their knowledge and skills in the physical, life, earth, and space sciences. There is a specific focus on explaining and understanding real-life events and processes in relation to the concepts and topics learned. 6th-8th graders also focus on applying scientific methods as described below in order to deepen their understanding and work like actual scientists.

In order to build science skills, your 6th-8th grader:

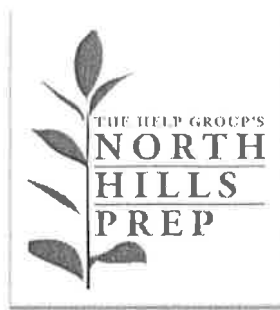
- Plans and conducts investigations and experiments.
- Applies the scientific method in order to practice like a scientist (there are many different ways people present "the scientific method," but here's a basic example):
 - Questions, observes, and researches.
 - Develops a hypothesis (based on observations and research).
 - Make predictions.
 - Experiments and follows multi-step processes and instructions in order to conduct experiments.
 - Develops a conclusion.
 - Compares the results of an experiment to what is written about the topic in a text.
- Analyzes and interprets data.
- Uses measurement and mathematical computations while working with data.
- Develops and presents explanations for processes and practices used and results obtained.
- Determines the main ideas of a scientific text and cites specific evidence to support ideas and claims about scientific texts.
- Learns topic-specific science vocabulary.
- Analyzes relevant charts, diagrams, and graphs about a scientific topic.

6th-8th Grade Social Studies

The Common Core does not address the specific topics to be covered in 6th grade; instead, it specifies the set skills to be covered in middle school. The grades in which these skills are covered and which topics are included vary according to different states' standards. Consult your child's school or state standards for further details on the specific material your child will study. The following skills have been set forth as essential for social studies and history in middle school.

In order to build social studies skills, your middle school student:

- Reads primary and secondary sources in order to:
 - Analyze the texts using evidence.
 - Understand the main ideas of the text.
 - Relate the texts to important historical events or concepts.
- Distinguishes between fact and opinion in a text.
- Uses technology and media to better understand concepts taught.
- Compares primary and secondary sources about the same topic.
- Learns about historical events within a context and as related to things such as geography, economy, and social and political factors.
- Learns about topics like ancient and global civilizations to gain a deeper understanding of history and the present global community.



Grade 8

Books

Mathematics: Big Ideas 8

English: Collections 8

Science: California Physical Science

Social Studies: America: History of Our Nation

Overview of 8th Grade

In their last year of middle school, 8th graders immerse themselves in preparation for high school by practicing and strengthening skills they learned in earlier years of middle school while also learning new (and often more complex) skills. In many ways, 8th grade is a year of transition, as students are expected to have mastered the ways of middle school and begin becoming “high-schoolers.” Specifically, 8th graders are expected to be independent thinkers and workers analyzing and explaining what they learn in both their writing and orally. 8th grade is also a time of celebration and excitement for many students as they anticipate high school.

8th Grade Reading

In 8th grade, students continue to practice many of the skills they learned in earlier grades, specifically paying attention to details like text evidence, language, and cross-text comparisons in different genres of text. However, 8th graders push their analyses of texts further as they examine the details and writing structure and assess how those elements affect the text.

In order to build reading skills, your 8th grader:

- Evaluates the evidence in texts to determine the strongest supports of an idea and analysis.
- Determines the main idea or theme of a text using evidence from the text to support it.
- Provides an objective summary of a text.
- Understands, summarizes, and tracks the progress of the main idea of a text, using evidence from the text.
- Analyzes how elements such as specific dialogue, events, or word usage impact the characters, the decisions they make, and other events and actions in the text.
- Understands the use of language in a text, including figurative language, analogies, and allusions to other texts.
- Compares and contrasts the different structures of texts including the structures of paragraphs and sentences.

- Analyzes the difference between characters' points of view and how these differences affect the text.
- Analyzes the pros and cons of using different forms of text and media to present a topic or idea.
- Compares a text to a film or play version of a text, paying specific attention to the way in which the film or play veers from the text.
- Analyzes how a modern text builds on or uses themes from other historical or older texts such as myths or the Bible.
- Analyzes texts that include conflicting information on the same topic and decipher when those are due to conflicting facts or interpretations.

8th Grade Writing

In the 8th grade, students continue to practice and refine many of the writing skills they learned in 7th grade while also learning some additional complex writing skills. Given that refining one's writing can take time and practice, students are not expected to cover a great deal of new skills. However, they do learn some new techniques and skills that enhance their writing and enable them to become better writers.

In order to build writing skills, your 8th grader:

- Writes arguments that present clear reasons and relevant evidence and include:
 - Introductions
 - Acknowledgements of opposing claims
 - Logical and orderly presentation of reasons and evidence
 - Graphics, special formatting, and multimedia, when appropriate
 - Support of the claims through the use of evidence from credible sources
 - A concluding sentence or paragraph that supports the argument made
 - A formal tone and style.
- Writes structured and well-organized opinion, research, and informative pieces that:
 - Use supporting claims and evidence based on credible texts and resources
 - Provide an introduction that includes an explanation of what follows
 - Develop topics through the use of facts, details, quotations, examples, and subject-specific terms and definitions
 - Include transitions that connect concepts, events, and paragraphs
 - Include a conclusion that supports the presented idea(s)
 - Maintain a formal "essay type" style
 - Integrate other forms of media and formats such as graphs, charts, headings, audio, or video when appropriate.
- Writes well-structured narratives (both true and fiction) that include:
 - A narrator, characters, and a point of view
 - Descriptive detail and sensory language to describe characters, settings, and experiences
 - Dialogue, pacing, reflection, and details and descriptions of characters, setting, and experiences
 - Thought-out word choice
 - A clear structure with a logical order and flow, as shown through the use of transition words and phrases and a logical sequence
 - A conclusion that is connected to and builds on the narrative.

- Plans, revises, and edits writing, specifically with guidance from teachers and peers, focusing specifically on trying new approaches and making sure the writing has a purpose and appeals to its audience.
- Uses technology and the Internet to produce and publish writing, work with others, and cite sources.
- Works on multiple short research projects that answer specific questions and cite multiple sources, while gathering additional questions for later research.
- Uses both print and digital resources to conduct research, focusing on using appropriate search terms and reliable sources.
- Uses quotes and a standard format for citation.
- Uses research to analyze and make inferences.

8th Grade Math

In 8th grade, students are introduced to and focus on several new mathematical concepts including: linear equations, functions, the Pythagorean Theorem, and volume, all of which are further described and defined below. In particular, students solve equations as applied in real-world ways to equip them with skills that may be practically useful and to understand the importance of math in their own lives.

In order to build math skills, your 8th grader:

- Solves linear equations, which are equations that make a straight line when graphed and are expressed as $y = mx + b$.
- Uses linear expressions to compare data that has two variables.
- Compares the lines graphed by two linear expressions and determines whether they are parallel, intersecting, or the same.
- Understands that there are rational and irrational numbers.
- Solves equations with integers that are whole numbers, both positive and negative.
- Solves equations with radicals that are "roots," such as square roots.
- Understands, compares, and solves equations with functions that are usually expressed as $f(n)$ and represent the relationships between an input and an output.
- Learns the concept of congruence (equal length) and similarity (when two objects have the same angles and are proportionate) through the use of models, transparencies, or software.
- Understands and solves equations using the Pythagorean Theorem: $a^2 + b^2 = c^2$
- Solves equations about the volume of cylinders, cones, and spheres, specifically as applied in real-world ways.
- Provides the thinking behind and the reasoning for how problems are solved; critiques others' reasoning.

6th-8th Grade Science

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- Applies the scientific method in order to practice like a scientist (there are many different ways people present "the scientific method," but here's a basic example):
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6th-8th Grade Social Studies

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 - Relate the texts to important historical events or concepts.
- Distinguishes between fact and opinion in a text.
- Uses technology and media to better understand concepts taught.
- Compares primary and secondary sources about the same topic.
- Learns about historical events within a context and as related to things such as geography, economy, and social and political factors.
- Learns about topics like ancient and global civilizations to gain a deeper understanding of history and the present global community.