## Little Lincoln: Early Kindergarten

## Early Kindergarten

Course Code: LI.LIL.000110.1.NN
Has Textbook: No
Course Length: 4 Quarters
Little Lincoln Early Kindergarten serves to prepare students for the course work found in Little Lincoln Kindergarten. In Early Kindergarten, students will be introduced to standards-based curriculum that includes daily lessons in reading, writing, and math, as well as routine exposure each week to social studies, science, and wellness. The curriculum is designed to cover 36 weeks of instruction, but it can be completed at each student's own pace.

Among the many topics students will explore are:
A variety of finger plays, action poems, nursery rhymes, and songs
Rhyme
Recognizing the letters of the alphabet with an emphasis on phonemic awareness
Recognizing and naming numerals 0 to 9

## Patterns

Holding a pencil correctly and tracing letters and numbers
Concepts of sharing, respect for others, and compromise
Specifics of the food pyramid and the importance of a healthy diet
Little Lincoln combines online and offline components. Online each day, students are introduced to Miss Palomine, their teacher. Miss Palomine teaches important lessons in two engaging teacher videos each day, reads one audio story per week, and is featured in an additional weekly wellness video with her sidekick, Socrates the Squirrel. Students are able to play a variety of online mini-games for extra practice and reinforcement and have access to a wide variety of songs that are tied to the daily learning objectives. They are also given the opportunity to create an avatar online and participate in the World of Midlandia.

In addition to the information provided online, students receive six boxes of materials to use through-out the school year. These include: one box of printed materials per nine-week season, one box of multiple sets of flashcards, a weather-related flip book titled Weather Socrates, and Little Lincoln Nursery Rhyme Collections, to be used during the daily Getting Started Activities, along with one box of supplies. The supply box includes art supplies, handwriting paper, a dry erase board and markers, a magnetic calendar, math manipulatives, and much more! Visit www.littlelincoln.org for a complete list of supplies.

## Each seasonal box includes:

1 Guide Book
3 Activities Books
1 book from Tales of Midlandia
Sight Word Cards in the Winter, Spring, and Summer boxes
Sight Word Books in the Summer box

## Little Lincoln: Kindergarten

## Kindergarten

Course Code: LI.LIL.000211.1.NN
Has Textbook: No
Students enrolled in Little Lincoln Kindergarten will build a solid foundation in the subjects of math, reading, writing, social studies, science, and visual arts. The curriculum is designed to cover 36 weeks of instruction, but it can be completed at each student's own pace.

Among the many topics students will explore are:
Good citizenship
Their environments
The elements of a story
Telling time
The concept of money
Basic problem solving
Recognizing the cardinal numbers up to 40
Recognizing and writing the letters of the alphabet with an emphasis on phonemic awareness Little Lincoln Kindergarten combines online and offline components. Online each day, students watch four engaging teacher videos featuring teachers including Mr. Reed Moore, Mrs. Triggle, and Dr. Algae; listen to short audio stories about Midlandia and the unique characters who reside there; and play a variety of mini-games designed to reinforce the daily learning objectives. Students are also given the opportunity to create an avatar online and participate in the World of Midlandia. Additionally, wellness is incorporated into Little Lincoln Kindergarten through weekly videos and activities that will benefit students as they learn about fitness, nutrition, and healthy living.

In addition to the information provided online, students receive five boxes of materials to use throughout the school year: one box of printed materials per nine-week season (four total) and one box of supplies. The supply box includes crayons, handwriting paper, a magnetic calendar, art supplies, science materials, math manipulatives, and much more! Visit www.littlelincoln.org for a complete list of supplies.

Each seasonal box includes:
1 Guide Book

1 box of Sight Word Books
3 Activities Books
2-3 books from Tales of Midlandia

Please Note: The offline activities described in the Guide Book and Activities Books are typically designed to be on-level. To meet the needs of all students, there are many enrichment opportunities known as Extend your thinking! These are meant to challenge the students who need it. In addition, there are opportunities called Reteaching for every subject; these activities are meant to help students who are having difficulty by allowing the objectives to be introduced and practiced in brand new ways.

## Little Lincoln: First Grade

## First Grade

Course Code: LI.LIL.100110.1.NN
Has Textbook: No
Course Length: 4 Quarters
Little Lincoln First Grade meets or exceeds the standards of traditional curricula for math, reading, writing, social studies, science, and visual arts, and does so by following elements of instruction and design that are similar to those of Little Lincoln Kindergarten. The curriculum is designed to cover 36 weeks of instruction, but it can be completed at each student's own pace.

Among the many topics students will explore are:
Adding and subtracting number facts up to 20
Estimating
Comparing and contrasting elements of a story
Blending separately spoken phonemes to form words
Studying simple machines and tools used to make work easier
Using the writing process to create various forms of writing
Identifying community roles
Identifying customs and various U.S. symbols and leaders
Little Lincoln combines online and offline components. Online each day, students watch four engaging teacher videos featuring teachers including Mr. Reed Moore, Mrs. Triggle, and Dr. Algae; listen to short audio stories about Midlandia and the unique characters who reside there; and play a variety of mini-games designed to reinforce the daily learning objectives. Students are also given the opportunity to create an avatar online and participate in the World of Midlandia. Additionally, wellness is newly in-corporated into Little Lincoln First Grade and features weekly videos and activities that will benefit students as they learn about fitness, nutrition, and healthy living.

In addition to the information provided online, students receive five boxes of materials to use throughout the school year: one box of printed materials per nine-week season (four total) and one box of supplies. The supply box includes writing journals, sentence strips, art supplies, a fossils kit, math manipulatives, and much more! Visit www.littlelincoln.org for a complete list of supplies.

Each seasonal box includes:

1 Guide Book
1 Box of Sight Word Books
3 Activities Books
2 books from Tales of Midlandia
Please Note: The offline activities described in the Guide Book and Activities Books are typically designed to be on-level. To meet the needs of all students, there are many enrichment opportunities known as Extend your thinking! These are meant to challenge the students who need it. In addition, there are opportunities called Reteaching for every subject; these activities are meant to help students who are having difficulty by allowing the objectives to be introduced and practiced in brand new ways.

## Little Lincoln: Second Grade

## Second Grade

Course Code: LI.LIL.100210.1.NN
Has Textbook: No
Little Lincoln Second Grade meets or exceeds the standards of traditional curricula for math, reading, writing, social studies, science, and visual arts, and does so by following elements of instruction and design that are similar to those of Little Lincoln Kindergarten and First Grade. The curriculum is designed to cover 36 weeks of instruction, but it can be completed at each student's own pace.

Among the many topics students will explore are:
Adding and subtracting whole numbers

## Fractions

Word problems
Subject and verb agreement
Figurative language
Using the writing process to create various forms of writing
Generating a timeline of events
Cultural diversity
Scientific inquiry
Little Lincoln combines online and offline components. Online each day, students watch four engaging teacher videos featuring teachers including Mr. Reed Moore, Mrs. Triggle, and Dr. Algae; listen to short audio stories about Midlandia and the unique characters who reside there; and play a variety of mini-games designed to reinforce the daily learning objectives. Students are also given the opportunity to create an avatar online and participate in the World of Midlandia. Additionally, wellness is newly in-corporated into Little Lincoln Second Grade and features weekly videos and activities that will benefit students as they learn about fitness, nutrition, and healthy living.

In addition to the information provided online, students receive five boxes of materials to use throughout the school year: one box of printed materials per nine-week season (four total) and one box of supplies. The supply box includes writing journals, art supplies, math manipulatives, supplies for various science projects, and much more! Five novels are also included as part of the curriculum.

## Each seasonal box includes:

1 Guide Book
1 box of Sight Word Books
3 Activities Books
1 book from The Little Lincoln Adventure Series, Level 2
Please Note: The offline activities described in the Guide Book and Activities Books are typically designed to be on-level. To meet the needs of all students, there are many enrichment opportunities known as Extend your thinking! These are meant to challenge the students who need it. In addition, there are opportunities called Reteaching for math, reading, and writing; these activities are meant to help students who are having difficulty by allowing the objectives to be introduced and practiced in brand new ways.

## Math 3 Part 1

## Third Grade

This course covers core mathematics concepts, including place value, rounding, estimation, word problems with addition and subtraction, the properties of multiplication, probability, measurement, shapes, patterns, decimals, and comparing fractions. These topics include skills that are necessary to build a foundation in geometry, algebra, trigonometry, and real-world problem solving.

Like all third grade courses, Math includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Math 3 Part 2

## Third Grade

This course covers core mathematics concepts, including place value, rounding, estimation, word problems with addition and subtraction, the properties of multiplication, probability, measurement, shapes, patterns, decimals, and comparing fractions. These topics include skills that are necessary to build a foundation in geometry, algebra, trigonometry, and real-world problem solving.

Like all third grade courses, Math includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Language Arts 3 Part 1

## Third Grade

This course combines reading, writing, spelling, grammar, vocabulary, and cursive handwriting. Students will read five novels throughout the year in addition to shorter fiction and nonfiction works, poetry, biographies, and fables. They will gain knowledge related to the writing process, parts of a sentence, parts of speech, and conducting research. They will also keep a reading response journal and will learn how to give effective oral presentations.

Like all third grade courses, Language Arts includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Language Arts 3 Part 2

## Third Grade

This course combines reading, writing, spelling, grammar, vocabulary, and cursive handwriting. Students will read five novels throughout the year in addition to shorter fiction and nonfiction works, poetry, biographies, and fables. They will gain knowledge related to the writing process, parts of a sentence, parts of speech, and conducting research. They will also keep a reading response journal and will learn how to give effective oral presentations.

Like all third grade courses, Language Arts includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Science 3 Part 1

## Third Grade

This course enables students to become junior scientists as they complete a variety of hands-on experiments and learn to log their observations and results in a science lab journal. Students will learn and follow the scientific method as they conduct experiments related to geology, biology, physics, Earth science, and wellness. They will gain knowledge related to the properties of rocks, soil, and fossils; the characteristics of various natural disasters; the various types of land formations; and health and nutrition.Like all third grade courses, Science includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Science 3 Part 2

## Third Grade

This course enables students to become junior scientists as they complete a variety of hands-on experiments and learn to log their observations and results in a science lab journal. Students will learn and follow the scientific method as they conduct experiments related to geology, biology, physics, Earth science, and wellness. They will gain knowledge related to the properties of rocks, soil, and fossils; the characteristics of various natural disasters; the various types of land formations; and health and nutrition.Like all third grade courses, Science includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Social Studies 3 Part 1

## Third Grade

This course gives students the opportunity to thoroughly explore the concept of community. Students will gain knowledge of diversity, geography, the economy, public service, and citizenship. Additional topics include the original thirteen colonies, the early pioneers, state and local government, and life in the past and present. This course shows students how their communities relate to others around the country and the world.Like all third grade courses, Social Studies includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Social Studies 3 Part 2

## Third Grade

This course gives students the opportunity to thoroughly explore the concept of community. Students will gain knowledge of diversity, geography, the economy, public service, and citizenship. Additional topics include the original thirteen colonies, the early pioneers, state and local government, and life in the past and present. This course shows students how their communities relate to others around the country and the world.Like all third grade courses, Social Studies includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Wellness 3 Part 1

## Third Grade

Course Code: LI.WEL.100312.1.NN
Has Textbook: Yes
Course Length: 1 Semester
This course is an optional part of third grade and includes access to the online Wellness Application, lessons about proper nutrition and exercise, and engaging videos that introduce kidfriendly recipes and ideas for physical fitness. Students complete one activity per week and can track their wellness online each day if they choose. Wellness supplies are included as an optional purchase.

## Wellness 3 Part 2

## Third Grade

Course Code: LI.WEL. 100312.2.NN
Has Textbook: Yes
Course Length: 1 Semester
This course is an optional part of third grade and includes access to the online Wellness Application, lessons about proper nutrition and exercise, and engaging videos that introduce kidfriendly recipes and ideas for physical fitness. Students complete one activity per week and can track their wellness online each day if they choose. Wellness supplies are included as an optional purchase.

## Getting Started 3 Part 1

## Third Grade

This course is an optional part of third grade and is designed to help students start each day off on the right foot. These activities build routine and structure into the day and introduce a variety of teachable moments. The Getting Started Kit includes flashcards for multiplication and division, the Worldseum board game, and the Ready, Set, Go test preparation book that teaches good study skills and test taking strategies. Finally, online, the students have access to the Brain Food activities including visual arts, music, family and consumer science, and technology.

## Getting Started 3 Part 2

## Third Grade

This course is an optional part of third grade and is designed to help students start each day off on the right foot. These activities build routine and structure into the day and introduce a variety of teachable moments. The Getting Started Kit includes flashcards for multiplication and division, the Worldseum board game, and the Ready, Set, Go test preparation book that teaches good study skills and test taking strategies. Finally, online, the students have access to the Brain Food activities including visual arts, music, family and consumer science, and technology.

## Math 4 Part 1

## Fourth Grade

Course Code: LI.MAT.100412.1.NN
Has Textbook: Yes
This course expands on many core third grade mathematics concepts and introduces new concepts as well. These concepts include place value; reading and writing whole numbers; comparing numbers; ordering numbers; word problems with addition, subtraction, multiplication and division; rounding and estimating; counting and making change with money; factors and multiples; telling time and calculating elapsed time; measurement; 2-D and 3-D shapes; various graphs and diagrams; probability; adding; subtracting; multiplying; converting and ordering fractions and decimals; completing function tables; and solving inequalities. Students will also recognize, reproduce, extend, create, and describe patterns. These topics include skills that are necessary to build a foundation in geometry, algebra, trigonometry, statistics, calculus, and realworld problem solving.

Like all fourth grade courses, Math includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Math 4 Part 2

## Fourth Grade

Course Code: LI.MAT.100412.2.NN
Has Textbook: Yes
This course expands on many core third grade mathematics concepts and introduces new concepts as well. These concepts include place value; reading and writing whole numbers; comparing numbers; ordering numbers; word problems with addition, subtraction, multiplication and division; rounding and estimating; counting and making change with money; factors and multiples; telling time and calculating elapsed time; measurement; 2-D and 3-D shapes; various graphs and diagrams; probability; adding; subtracting; multiplying; converting and ordering fractions and decimals; completing function tables; and solving inequalities. Students will also recognize, reproduce, extend, create, and describe patterns. These topics include skills that are necessary to build a foundation in geometry, algebra, trigonometry, statistics, calculus, and realworld problem solving.

Like all fourth grade courses, Math includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Language Arts 4 Part 1

## Fourth Grade

Course Code: LI.ENG.100412.1.NN
Has Textbook: Yes

## Course Length: 1 Semester

This course combines reading, writing, spelling, grammar, vocabulary, and cursive handwriting. Students will read various novels throughout the year, as well as fiction and nonfiction, poetry, and myths. They will create and use graphic organizers and charts to compare and contrast information from their readings and to organize information for their own writing. They will improve their reading and writing by using a dictionary and thesaurus and by learning how to identify the author's purpose for writing. Students will expand their knowledge related to parts of speech, proofreading, and editing their own writing and will complete an oral presentation. They will also keep a journal where they will respond to all types of stories.

Like all fourth grade courses, Language Arts includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Language Arts 4 Part 2

## Fourth Grade

Course Code: LI.ENG.100412.2.NN
Has Textbook: Yes

## Course Length: 1 Semester

This course combines reading, writing, spelling, grammar, vocabulary, and cursive handwriting. Students will read various novels throughout the year, as well as fiction and nonfiction, poetry, and myths. They will create and use graphic organizers and charts to compare and contrast information from their readings and to organize information for their own writing. They will improve their reading and writing by using a dictionary and thesaurus and by learning how to identify the author's purpose for writing. Students will expand their knowledge related to parts of speech, proofreading, and editing their own writing and will complete an oral presentation. They will also keep a journal where they will respond to all types of stories. Like all fourth grade courses, Language Arts includes online lessons complete with engaging teacher videos, minigames for practice and reinforcement, links to great resources, fun online activities, and handson activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Science 4 Part 1

## Fourth Grade

Course Code: LI.SCI.100412.1.NN
Has Textbook: Yes
In this course, students will develop a science journal to record notes, drawings, questions, and data from the scientific experiments that they complete. Through these experiments, they will learn more about famous scientists, scientific instruments and diagrams, tables, and graphs used by scientists. They will conduct safe and simple experiments related to biology, Earth science, ecology, astronomy, geology, light and electricity, physics, anatomy, and wellness. Students will also relate their experiments to real-world problems such as the effects of pesticides, pollution, and fertilizer.Like all fourth grade courses, Science includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Science 4 Part 2

## Fourth Grade

Course Code: LI.SCI.100412.2.NN
Has Textbook: Yes

## Course Length: 1 Semester

In this course, students will develop a science journal to record notes, drawings, questions, and data from the scientific experiments that they complete. Through these experiments, they will learn more about famous scientists, scientific instruments and diagrams, tables, and graphs used by scientists. They will conduct safe and simple experiments related to biology, Earth science, ecology, astronomy, geology, light and electricity, physics, anatomy, and wellness. Students will also relate their experiments to real-world problems such as the effects of pesticides, pollution, and fertilizer.Like all fourth grade courses, Science includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Social Studies 4 Part 1

## Fourth Grade

Course Code: LI.SOC.100412.1.NN
Has Textbook: Yes
This course will cover the five themes of geography in the United States, and students will read and interpret maps, globes, pictographs, bar graphs, line graphs, and tables. Students will investigate factors that contributed to the development of cities and industries in certain areas and will trace the evolution of U.S. water systems. They will also identify the political systems of the United States including branches of government and differences between national, state, and local governments. They will analyze the geographic, political, economic, and social structure of each region of the U.S. and examine history beginning with the Native Americans and continuing to the present day.

Like all fourth grade courses, Social Studies includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Social Studies 4 Part 2

## Fourth Grade

Course Code: LI.SOC.100412.2.NN
Has Textbook: Yes
This course will cover the five themes of geography in the United States, and students will read and interpret maps, globes, pictographs, bar graphs, line graphs, and tables. Students will investigate factors that contributed to the development of cities and industries in certain areas and will trace the evolution of U.S. water systems. They will also identify the political systems of the United States including branches of government and differences between national, state, and local governments. They will analyze the geographic, political, economic, and social structure of each region of the U.S. and examine history beginning with the Native Americans and continuing to the present day.

Like all fourth grade courses, Social Studies includes online lessons complete with engaging teacher videos, mini-games for practice and reinforcement, links to great resources, fun online activities, and hands-on activities that are completed with the printed activities books and a variety of supplies (included as an optional purchase).

## Wellness 4 Part 1

## Fourth Grade

Course Code: LI.WEL.100412.1.NN
Has Textbook: Yes
This course is an optional part of fourth grade and includes access to the online Wellness Application, lessons about proper nutrition and exercise, and engaging videos that introduce kidfriendly recipes and ideas for physical fitness. Students complete one activity per week and can track their wellness online each day if they choose. Wellness supplies are included as an optional purchase.

## Wellness 4 Part 2

## Fourth Grade

Course Code: LI.WEL.100412.2.NN
Has Textbook: Yes
This course is an optional part of fourth grade and includes access to the online Wellness Application, lessons about proper nutrition and exercise, and engaging videos that introduce kidfriendly recipes and ideas for physical fitness. Students complete one activity per week and can track their wellness online each day if they choose. Wellness supplies are included as an optional purchase.

## Getting Started 4 Part 1

## Fourth Grade

Course Code: LI.GSK.100412.1.NN
Has Textbook: Yes
This course is an optional part of fourth grade and is designed to help students start each day off on the right foot. These activities build routine and structure into the day and introduce a variety of teachable moments. The Getting Started Kit includes the 3-2-1 Blastoff! test preparation book that teaches good study skills and test taking strategies. Finally, online, the students have access to the Brain Food activities including visual arts, music, family and consumer science, and technology.

## Getting Started 4 Part 2

## Fourth Grade

Course Code: LI.GSK.100412.2.NN
Has Textbook: Yes
This course is an optional part of fourth grade and is designed to help students start each day off on the right foot. These activities build routine and structure into the day and introduce a variety of teachable moments. The Getting Started Kit includes the 3-2-1 Blastoff! test preparation book that teaches good study skills and test taking strategies. Finally, online, the students have access to the Brain Food activities including visual arts, music, family and consumer science, and technology.

## Exploring Keyboarding

## Lincoln Explorations

Exploring Keyboarding is an exciting beginner's course that teaches proper typing techniques through interactive lessons and engaging activities. Students will learn proper posture, correct finger positioning, and effective typing strategies. Some of the typing strategies associated with this course include learning all of the letters of the alphabet, punctuation, numbers, shift keys and control keys, backspace and delete keys, the enter key, the caps lock key, and the tab key. These strategies will be helpful in enabling students to succeed in a technological world.

## Exploring Music

## Lincoln Explorations

This course is designed for beginning musicians with little or no background in music or keyboard playing. Exploring Music offers an introduction to basic keyboard skills and note reading. This is a hands-on course where instruction will be provided through an interactive keyboard. Students will use the keyboard to learn the keys, note names and values, and treble and bass staff lines and spaces. Students will also learn proper techniques for playing the keyboard. In addition, this course will discuss musical concepts such as the repeat sign, time signatures, and measures.

## Exploring Photography

## Lincoln Explorations

Exploring Photography is a beginner's course that teaches students about cameras and how to take better photographs. Students will examine the different parts of a camera and will be able to describe how the parts work together. Through examining the structure of pictures, students will learn the importance of composition in photography. Areas of exploration include detecting lighting conditions, using different viewpoints or angles, finding subject matter to photograph, and creating interesting compositions. Particular emphasis is placed on viewing photographs by exploring activities that include taking pictures.

## Exploring Study Skills

## Lincoln Explorations

Course Code: LI.ELE.200507.0.NN

Has Textbook: Yes
This course is filled with helpful strategies and practical suggestions to help students improve their study skills. Exploring Study Skills will help students become better prepared and more successful in school. Students will learn how to set up the perfect study space and how to use effective time management skills. Each student will discover his or her individual learning style and how to use it when completing homework assignments and studying for tests. This course will also focus on listening skills and will help students become proficient readers. From homework hints to tackling tests and note taking, this course will help students study to the best of their abilities, to help them become successful, lifelong learners.

## Exploring the Kitchen

## Lincoln Explorations

Course Code: LI.ELE.200207.0.OT
Has Textbook: Yes
Exploring the Kitchen will familiarize students with tools, appliances, and common kitchen etiquette, including how to set a proper table, safety techniques, and cleanliness. Students will complete basic recipes using beginning cooking techniques. Students will receive some cooking supplies to use throughout the course; however, each student is responsible for purchasing the food for each recipe, and all purchases are non-refundable. Due to food allergies, some ingredients can be substituted or eliminated.

## Language Arts 5 Part 1

## Fifth Grade

Course Code: LI.ENG.200507.1.HA
Has Textbook: Yes
Language Arts 5 is a course with many layers. It is designed around the idea that every student is capable of learning the materials and concepts presented throughout. Students will learn proper writing strategies in this course, writing several essays, including a persuasive essay about vacations they would like to take and a how-to essay on making a certain food dish. Students will read several selections, including The Hot and Cold Summer, Dear Mrs. Parks, Iditarod Dream, and "Everglades." They will learn about point of view, sentence variety, prefixes, suffixes, complete subjects, and predicates. With each day, students will learn to discover their own strengths and abilities. Students will encounter reading, writing, vocabulary, grammar, and spelling lessons daily. They will also keep a reading log of stories they have read outside of the assigned course material to encourage them to enjoy reading. Additionally, students in this course will be exposed to many literary forms that will reinforce the major concepts of the English language.

## Language Arts 5 Part 2

## Fifth Grade

In Language Arts Part 2, students will continue to learn and to display proper writing strategies learned in Part 1. They will complete writing exercises such as a persuasive essay and a response to literature. They will also learn how to write a play and a tall tale. Some examples of the stories students will read are "The Case of the Flying Saucer People," William Shakespeare and the Globe, and Frindle. Students will learn how to organize their writing into introduction, body, and conclusion paragraphs. Students will continue to have daily spelling and vocabulary lessons, and will continue their reading logs throughout this course. Additionally, students will learn about fact and opinion, figurative language, regular and irregular verbs, and different parts of speech. Students will also be taught basic writing and reading skills that will prepare them for Language Arts 6.

MIDDLE SCHOOL

## Math 5 Part 1

## Fifth Grade

Math 5 Part 1 will help students learn mathematical building blocks that they will use in their upcoming math courses. Students enrolled in this course will learn about place value, addition and subtraction of whole numbers and decimals, and multiplication of whole numbers and decimals. Other topics include multiplication of variables and expressions, division number sense, division of whole numbers and decimals, divisibility, and prime and composite numbers. As students progress through the course, they will also learn basic algebra concepts and will study graphing and probability. Math 5 Part 1 is designed to help students prepare for Part 2 of this course.

MIDDLE SCHOOL

## Math 5 Part 2

## Fifth Grade

In Math 5 Part 2, students will learn about geometry concepts such as lines, angles, circles, polygons, symmetry, and transformations. Students will also gain an understanding of fractions by studying fraction relationships, fractions and decimals, addition and subtraction of fractions, and multiplication and division of fractions. Addition and subtraction of mixed numbers, linear measurement and perimeter, area, time, and temperature will also be discussed. The completion of Math 5 Parts 1 and 2 will prepare students for Math 6.

## Science 5 Part 1

## Fifth Grade

Course Code: LI.SCI.200508.1.PE
Has Textbook: Yes
Science 5 Part 1 will introduce students to the fascinating world of middle school science.
Through highly interactive and exciting lessons, students will learn about the processes of life, interactions of living things, the classification system of organisms, and the structure of Earth. The utilization of hands-on activities, videos, games, and animations will further engage and challenge students to achieve new heights of scientific knowledge. This course will help build the foundation of scientific learning by introducing the main aspects of science to students. Students will become scientific investigators as they engage in this exciting world with the assistance of three fun-loving characters: Tiny the Elephant, Doris the Giraffe, and Chippie the Beaver. This course includes online lessons and textbook reading. This course includes a science kit.

## Science 5 Part 2

## Fifth Grade

Course Code: LI.SCI.200508.2.PE
Has Textbook: Yes
In Science 5 Part 2, students will continue their journey through the wonderful world of scientific learning. Through interactive and stimulating lessons, students will discover fun facts about the atmosphere, Earth's systems, the solar system, types of matter, and different forms of energy. The utilization of hands-on activities, videos, games, and animations will further engage and challenge students. Science 5 is considered the base foundation of scientific learning by introducing students to the main concepts of the world of science. As students continue their quests as scientific investigators, they will partake in many educational trips with the assistance of three fun-loving characters: Tiny the Elephant, Doris the Giraffe, and Chippie the Beaver. Students will travel through the scientific concepts, eager to learn more. This course includes online lessons, textbook reading, and a science kit.

MIDDLE SCHOOL

## Social Studies 5 Part 1

## Fifth Grade

## Course Code: LI.SOC.200508.1.PE

Has Textbook: Yes

Course Length: 1 Semester

Social Studies 5 Part 1 will introduce students to the early settlers of the United States including several Native American groups, European explorers, and the Spanish. This course will also identify the hardships that many Africans endured while being enslaved in this country and the structure and civilization of the early colonies. Social Studies 5 Part 1 will conclude by describing early American wars including the French and Indian War, the American Revolution, and the War of 1812.

MIDDLE SCHOOL

## Social Studies 5 Part 2

## Fifth Grade

Social Studies 5 Part 2 will introduce learners to the struggles in the United States related to the Civil War. This course will explain the division that grew between the North and the South due to their differing perspectives regarding slavery, government, and war. Key concepts will include the Battle of Gettysburg; the end of the Civil War and Reconstruction; the 13th, 14th, and 15th Amendments; and the end of slavery. This course will also highlight the main points, battles, and victories of World War I and World War II as well as the Cold War, and will conclude by describing the current American government and the American people.

## Language Arts 6 Part 1

## Sixth Grade

## Course Code: LI.ENG.200611.1.HO

Has Textbook: Yes
Language Arts 6 Part 1 explores several types of literature. Students will be expected to write essays, including a comparison-contrast essay, a how-to essay, a short story, and a response to literature. Students will read intriguing stories written by famous and influential authors. The course will cover the writing process and effective writing techniques, and students will produce their own pieces of literature in multiple genres. Proper conventions of grammar will be reinforced.

## Language Arts 6 Part 2

## Sixth Grade

Course Code: LI.ENG.200611.2.HO
Has Textbook: Yes
Course Length: 1 Semester
Language Arts 6 Part 2 explores several types of literature written by famous, influential authors. In composition, the writing process is emphasized, while students produce their own short stories, comparison-contrast essays, and how-to essays. Proper conventions of grammar are covered. Grammar topics include nouns, pronouns, adjectives, relative and interrogative pronouns, verbs, adverbs, prepositional phrases, adjective phrases, simple sentence structure, punctuating words in a series, and understanding and using clauses.

MIDDLE SCHOOL

## Math 6 Part 1

## Sixth Grade

Math 6 Part 1 will provide a solid foundation in mathematics by covering topics such as decimals, fractions, expressions, equations, graphing, measurement, and statistics. This course will introduce students to ratios, percentages, and geometry, and will also teach students how to collect and interpret data and display their findings through graphs. Students will learn to recognize patterns and to work with variables. Prime numbers, factoring, and divisibility rules will be covered as well, and students will add, subtract, multiply, and divide fractions.

MIDDLE SCHOOL

## Math 6 Part 2

## Sixth Grade

Course Code: LI.MAT.200608.2.PE
Has Textbook: Yes
Course Length: 1 Semester
Math 6 Part 2 includes discussions of ratios and solving proportions. Geometry concepts such as triangles, angles, perimeter, and area will also be covered. As the course progresses, students will learn about circles, 3-D figures, surface area, and the volume of different prisms. Finally, students will explore graphing and determine how integers are used in real-world situations.

## Science 6 Part 1

## Sixth Grade

Course Code: LI.SCI.200607.1.PE
Has Textbook: Yes
Science 6 Part 1 will engage students in the intriguing world of science. The students will become mini-scientists while investigating and gaining knowledge of important topics in science, such as the classification of animals and their unique behaviors, the planet Earth and its fascinating features, and the constructive and destructive forces that affect our planet. The use of fun-filled labs and enticing videos will help students extend their knowledge and enhance their understanding of their surroundings. Sixth grade science is a stepping stone in science education that will strengthen students' foundation of scientific awareness. This will also help students appreciate the exciting world of science around them. This course includes online lessons, textbook reading, and a science kit.

## Science 6 Part 2

## Sixth Grade

Science 6 Part 2 will resume with the students' scientific learning about the remarkable world of science. Students will continue their journeys as mini-scientists by gaining knowledge of crucial topics such as the effects of weather and climate, the importance of the atmosphere, and the shocking facts about electricity and magnetism. Students will participate in hands-on experiments and become inspired by fascinating videos that will extend their knowledge and understanding of their surroundings. Sixth grade science is a major stepping stone in science education that helps build a stronger foundation of scientific awareness. This course will also help students appreciate the exciting world of science around them. This course includes online lessons, textbook reading, and a science kit.

## Social Studies 6 Part 1

## Sixth Grade

Social Studies 6 Part 1 will focus on world history from the beginnings of human civilization to the present day. Students will learn to evaluate the connections between geography and history. Topics in the first part of this course will include the Stone Age, the Persian Empire, and ancient Egypt and its advances in science and medicine. Students will then move on to study various world religions, such as Hinduism and Buddhism. Lessons will include discussions of early Chinese and Greek societies and cultures and the rise and fall of the Roman Empire. The final unit of the course will include studies of the Byzantine Empire, Muslim and Islamic beliefs, the Ottoman Empire, and various regions of Africa. Throughout this course, students will have access to interactive online activities and to compelling Discovery Channel School videos that will explain world history and enhance the course. The textbook for this course provides built-in reading support and helps students build map skills to better understand the world. It also helps students develop reading, writing, and geography skills.

MIDDLE SCHOOL

## Social Studies 6 Part 2

## Sixth Grade

Course Code: LI.SOC.200608.2.PE
Has Textbook: Yes
Social Studies 6 Part 2 focuses on the Age of Discovery through the modern day. Students will be introduced to the early civilizations of the Americas and Europe during the Middle Ages. Students will then enter the Renaissance and Reformation periods in Europe and will move on to study the rise of monarchies and the English, American, and French revolutions. Finally, students will study World War I, World War II, the Cold War, and the world since 1945.

## English 7 Part 1

## Seventh Grade

Course Code: LI.ENG.200711.1.HO
Has Textbook: Yes
English 7 Part 1 focuses on the study of grammar, literature, and composition. Students will learn about elements of grammar such as pronouns, clauses, and subjects and predicates. The literature selections focus mainly on short stories to help students gain knowledge regarding literary elements and devices including foreshadowing, point of view, and characterization. Reading selections provide students with the opportunity to improve reading comprehension skills, to develop vocabulary, and to make inferences. Students will compose formal writing assessments including two compare and contrast essays, a fictional narrative, and a persuasive essay.

## English 7 Part 2

## Seventh Grade

Course Code: LI.ENG.200711.2.HO
Has Textbook: Yes
English 7 Part 2 continues the focus on grammar, literature, and composition from English 7 Part 1. Students will read from a variety of literary genres including nonfiction, poetry, drama, myths, and folk tales. Students will read nonfiction texts such as autobiographies, biographies, essays, consumer documents, public documents, and workplace documents. In addition, students will read poems, plays, myths, and folk tales. Reading selections provide students the opportunity to improve reading comprehension skills such as summarizing, making predictions, and making generalizations. Students will also gain knowledge of figures of speech, cause and effect, and author's purpose. Students will compose formal writing assessments including a descriptive essay and a how-to essay.

## Math 7 Part 1

## Seventh Grade

In Math 7 Part 1, students will add, subtract, multiply, and divide fractions, decimals, and integers. In addition, they will work with equations, factors, proportions, rates, and ratios. Students will learn to solve one-step equations and will use proportions to solve real-world problems. Students will also develop an understanding of the coordinate plane by working with ordered pairs, linear and nonlinear functions, and patterns. Students can use videos, games, and practice problems to help emphasize key concepts. The concepts covered in Math 7 Part 1 are critical building blocks for Math 7 Part 2, as well as for future math classes.

## Math 7 Part 2

## Seventh Grade

Students will learn to solve two-step equations and will work with inequalities. This course will offer a solid foundation in mathematics by exploring topics that include geometric concepts and probability. The geometry discussion will include lines, rays, segments, angles, triangles, quadrilaterals, circles, irregular figures, prisms, and cylinders. With probability, students will work with experimental and theoretical probability, as well as permutations and combinations. Students will also work with percentages, a concept from Math 7 Part 1. Students can utilize videos, online games, and practice problems to help emphasize key concepts.

## Science 7 Part 1

## Seventh Grade

Course Code: LI.SCI.200712.1.HO
Has Textbook: Yes
Science 7 Part 1 explores many aspects of science. Students will begin the course by identifying matter as the basic building block of life. Students will then explore the cell and all of its working parts before being introduced to Earth's organisms and their processes. Finally, students will investigate Earth's water and atmospheric processes and determine how each produces energy systems. This course includes both online lessons and textbook reading, and the opportunity for hands-on learning through labs.

## Science 7 Part 2

## Seventh Grade

In the second part of Science 7, students will explore structural changes involving the Earth, ranging from the past to the present. This investigation will include the rock cycle, plate tectonics, and mineral formation. Students will inquire about the history of our universe and what it means to live in an Earth, Moon, and Sun system. Students will examine motion, forces, and various types of energy. Finally, students will examine types of sound and light energy. This course includes online lessons, textbook reading, and the opportunity for hands-on learning through labs.

## Social Studies 7 Part 1

## Seventh Grade

Course Code: LI.SOC.200712.1.HO
Has Textbook: Yes
Course Length: 1 Semester
Social Studies 7 Part 1 will encourage students to think like geographers by teaching them to study the Earth according to the five themes of geography. Students will use these themes to determine where something is located, such as a region, an ethnic group, a landform, or a trade route, and they will determine why these things can be found in particular places. The answers to these basic questions will also equip students to more fully understand the geography, history, culture, regions, and contemporary issues facing the people of the Americas, Europe, and Russia.

MIDDLE SCHOOL

## Social Studies 7 Part 2

## Seventh Grade

Course Code: LI.SOC.200712.2.HO
Has Textbook: Yes
Course Length: 1 Semester
Social Studies 7 Part 2 invites students to continue using the geographical tools and concepts that they mastered in Part 1 of this course. Students will learn about geography, history, culture, religions, and contemporary issues facing the people of Asia, Africa, and the Pacific World. By using an interactive textbook, students will explore how each of these places has been shaped by history, but has also developed a rich, thriving culture that can be seen today.

## English 8 Part 1

## Eighth Grade

In English 8 Part 1, students will examine literary concepts by reading, interpreting, and writing about a variety of literature and other cultural texts. Students will survey a broad selection of readings while studying the structures of different literary genres, the elements of narratives and of characterization, literary devices and themes, and the concepts of style and grammar.

## English 8 Part 2

## Eighth Grade

English 8 Part 2 will build upon concepts covered in English 8 Part 1 while exploring new information.This course is comprised of different genres of literature, grammar, writing, and vocabulary. The major topics of this course include elements of nonfiction, reading for life (and real world documents), theme, elements of drama, and research. The focus is on building reading skills and understanding what is read. Students will learn reading strategies appropriate to the different genres of literature and apply these strategies to the readings. Basic skills are emphasized in the context of literary pieces and are reinforced with practice and essay writing. Added to Part 2 is a research project that introduces students to the concepts of quality research, citations, and formal writing.

MIDDLE SCHOOL

## Math 8 Part 1

## Eighth Grade

Math 8 Part 1 will explore a variety of concepts such as rational numbers, algebraic equations, graphs and functions, real numbers, exponents, and the coordinate plane. Students will learn to implement real-world applications to the more abstract algebraic concepts found throughout the course. Video tutorials, online math activities, and self-check web quizzes ensure students receive the visual and special instruction necessary to conceptualize these abstract concepts, better preparing them for advanced math courses. This course provides the foundation for Math 8 Part 2.

MIDDLE SCHOOL

## Math 8 Part 2

## Eighth Grade

In Math 8 Part 2, students will focus on concepts that prepare them for Algebra, including solving multi-step equations, graphing lines, and interpreting slope. Students will also learn about angles, polygons, and volume of solid figures. In addition, students will learn about elementary statistics. Video tutorials, online math activities, and self-check web quizzes ensure students receive the visual and special instruction necessary to conceptualize these abstract concepts, better preparing them for advanced math courses.

## Science 8 Part 1

## Eighth Grade

Course Code: LI.SCI.200812.1.HO
Has Textbook: Yes
Science 8 Part 1 introduces eighth grade students to an integrated approach to physical, environmental, and life sciences. Students will study science concepts and problem solving while exploring a wide variety of aspects of the living and non-living world of science around them. Students will investigate important topics in histology (cells), heredity, the biology of living organisms, and finally, an introduction to meteorology. Students will be given the chance to identify cells and cell compounds, and describe the cell in its environment. Learners will then examine different cell processes that lead to energy within the cell. Genetics and heredity will also be explored as students discover the importance of Gregor Mendel and his work with heredity, as well as how these same genetic principles relate to human inheritance and disorders. Students will analyze Charles Darwin's work with adaptation, natural selection, and the evolution of organisms. Finally, students will examine different types of meteorological processes that occur on Earth. The Science 8 curriculum will provide an effective transition for students moving on to high school sciences or a higher order of scientific learning and understanding. This course includes online lessons, textbook reading, and the opportunity for hands-on learning through labs.

## Science 8 Part 2

## Eighth Grade

Course Code: LI.SCI.200812.2.HO
Has Textbook: Yes
Science 8 Part 2 continues with the examination of meteorological processes. The remainder of Science 8 Part 2 is comprised of topics involving geology, astronomy, and physics. Learners will examine different types of geological processes throughout Earth's history. Students will analyze the formation and composition of various planets and celestial bodies. Finally, students will examine categories of motion, forces, and energy. The Science 8 curriculum will provide an effective transition for students moving on to high school sciences or a higher order of scientific learning and understanding. This course includes online lessons, textbook reading, and the opportunity for hands-on learning through labs.

## Social Studies 8 Part 1

## Eighth Grade

Social Studies 8 Part 1 teaches students about American history and society, the first human migrations to the Americas, the European colonization of the Americas, the founding of the United States, and the end of the Reconstruction period after the Civil War. Students will explore the causes and the effects of the French and Indian War, and will study the First Continental Congress, the Declaration of Independence, and the challenges of governing a new nation. The course will move through the growth of the United States, including its political landscape in the early 1800s, slavery, and territorial expansion. These discussions will lead to lessons that cover Manifest Destiny, the Civil War, and the Reconstruction of post-Civil War America.

## Social Studies 8 Part 2

## Eighth Grade

Course Code: LI.SOC.200811.2.PE
Has Textbook: Yes
Social Studies 8 Part 2 will continue to take students on a journey through American history. This course will begin with the end of the post-Civil War Reconstruction, this course will teach students about important historical events through modern day. Students will begin by learning about the Old West, the mining and railroad industries, and the Nineteenth Amendment, which gave women voting rights. The course continues by discussing the Spanish-American War, World War I and II, the Great Depression, the Holocaust, the Korean War, and the Cold War. As students progress to contemporary history, they will learn about the Civil Rights Movement and Presidents Kennedy, Johnson, Nixon, and Reagan. This course will also include a study of the terrorist attacks of September 11, 2001, and America's role in the global economy.

# Art \& Music Exploration 

## Eighth Grade

Course Code: LI.ART.201210.0.OT
Has Textbook: Yes

## Course Length: 9 Weeks

Art \& Music Exploration will introduce visual art and music as artistic forms and provide an opportunity for students to experience the arts. It will present many different styles and works of art and music. This course includes an overview of different types of art and music by teaching students about Pennsylvania artists and musicians, focusing on a timeline of art, and exposing students to varied musical styles. The focus will remain on the elements of both art and music as students discover the richness the arts bring to life. Audio podcasts, videos, and hands-on and web-based activities keep learners engaged in the course so that they develop a new appreciation for both art and music. The first portion of the course will teach students how art is created, as well as how art reflects and influences history and culture. In the second portion of the course, students will learn how music is created and how music reflects and influences history and culture.

## Discovering Music

## Lincoln Discoveries

Discovering Music is designed for beginning musicians with some background in music or keyboard playing. Music is a very hands-on, interactive subject area. Discovering Music will incorporate the performance aspects of music and an understanding of music theory. Students will use the keyboard to learn fun, creative songs with the use of Internet and interactive web pages. Students will be able to read notes on the staff and play pieces in $C$ and $G$ positions, to identify and play melodic and harmonic intervals, and to play C Major chords.

## Discovering Digital Photography

## Lincoln Discoveries

Course Code: LI.TEC.200107.0.OT

Has Textbook: Yes
Course Length: 9 Weeks
Discovering Digital Photography will introduce students to the basic features of a digital camera as well as the various techniques necessary for taking interesting and vivid digital pictures. Learners will find out how to create the best shots by adjusting the color, the lighting, and the setup of a camera. This course also includes helpful editing tips that enable up-and-coming photographers to create high-quality photos. Discover the art of digital photography in this fascinating course.

## Discovering Digital Painting

## Lincoln Discoveries

Course Code: LI.TEC.200307.0.QU
Has Textbook: Yes
Discovering Digital Painting will teach students how to create exciting paintings in a matter of minutes using only their computers and their imaginations. Learners will put their traditional paints, brushes, and canvases away because these days, artists are creating digital paintings for book covers, illustrations, and video games directly on their computers. Students will learn how digital painting is becoming an emerging art form in which traditional painting mediums such as watercolors, oils, and spray paints are applied using digital tools, software, and computers. After learning a few basic techniques, only a student's time and commitment can limit his or her creativity.

## Discovering Digital Drawing

## Lincoln Discoveries

Discovering Digital Drawing is an experimentation course for students interested in digital media. Drawing is the process of making art with lines - but in this course, pencils and markers will be put away. Instead, the digital counterparts to these traditional tools will be explored. This is an interactive course that assists students in creating dynamic compositions with just the click of a mouse and the stroke of the stylus. Students will learn to sharpen observation skills, to communicate ideas, and to express feelings while learning the language of Photoshop Elements. Rules of composition, the elements of art and principles of design, tricks that artists use to organize artwork, and virtual tours to museums and artists' studios are included in this course.

## Starting the Road to Wellness

## Middle School Health

Starting the Road to Wellness is a one-semester course that encompasses a variety of topics with a focus on nutrition and physical fitness. The course includes basic nutrition principles and practices in addition to dietary guidelines. It will teach students how to read labels and how to understand food safety concepts. Other areas addressed include the foundations of physical fitness, exercise guidelines, and sports nutrition. This course will help students to become selfmotivated about leading a healthy lifestyle. This course is appropriate for students in seventh and eighth grade.

# Middle School Health 

## Middle School Health

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Course Code: LI.HEA.200609.0.HO
Has Textbook: Yes
Course Length: 1 Semester
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Middle School Health has been designed to introduce students to the many aspects of health they may encounter in middle school. This is a one-semester course that will focus on topics such as health and wellness, healthy relationships, violence, drugs and alcohol, diseases, and bodily changes. This is an exciting and fun course that will make students aware of ways to become healthier now and in the future.

## English 9 Part 1

## English: High School English

Course Code: LI.ENG.300911.1.HO
Has Textbook: Yes
English 9 Part 1 introduces learners to elements of literature from classic to modern times using the genres of fiction and nonfiction. Through reading, learners will develop skills in literary analysis and interpretation by establishing knowledge of literary elements such as plot and setting, character, narrator and voice, tone and mood, and symbolism and irony. Learners will also gather knowledge regarding form, style, and persuasion within nonfiction works. Skills for strengthening vocabulary, grammar, and mechanics will be examined as well, and lessons focusing on the stages of the writing process will be evaluated. Learners will demonstrate their knowledge through a variety of assessments. These assessments will include an examination of setting and characterization, writing narratives, and writing a persuasive essay.

## English 9 Part 2

## English: High School English

Course Code: LI.ENG.300911.2.HO
Has Textbook: Yes
English 9 Part 2 covers the elements of literature from classical to modern times using forms such as short stories, novels, poetry, drama, and essays. Students will begin by studying poetry and analyzing the poems of several writers. While reading, students will study an assortment of poetic devices, including figurative language, tone, and diction. The main works selected for this course are the epic The Odyssey and Shakespeare's drama The Tragedy of Romeo and Juliet. Students will develop skills in literary analysis and interpretation, while also practicing strategies for strengthening vocabulary, grammar, and mechanics. Students will demonstrate knowledge of content through a variety of writing assignments, such as completing graphic organizers, writing an ending to a play, and creating an itinerary. The final unit of this course will focus on consumer and technical documents, as students will examine several real-world texts, including online resources and workplace materials. Students will display a mastery of these forms through learning activities and assessments, including quizzes, exams, projects, and essays.

## English 10 Part 1

## English: High School English

Course Code: LI.ENG.301011.1.HO
Has Textbook: Yes
English 10 Part 1 continues to build upon the concepts presented in English 9, through a focus on literature, grammar, and composition. Students will begin by examining the different elements of a story, including plot, setting, character, narrator, and voice. To understand these concepts, students will read a variety of works from the Elements of Literature textbook, including "By Any Other Name," "Typhoid Fever," "The Storyteller," and "The Cold Equations." Throughout the course, students will study various parts of speech, readings, and poetry. Some of the poetic works students will review include "Grape Sherbet" and "The Legend." Students will demonstrate their writing abilities by completing a literary analysis paper after reading a selection of stories from the book. Strategies for strengthening vocabulary and grammar skills will be examined and practiced. Students will display mastery of these concepts through various learning activities and assessments, including tests, quizzes, writing assignments, and journal exercises.

## English 10 Part 2

## English: High School English

Course Code: LI.ENG.301011.2.HO
Has Textbook: Yes
English 10 Part 2 continues to enhance and refine the skills learned in English 10 Part 1 and English 9. Students will study classic literature, including select works by William Shakespeare, and will become familiar with historical fiction while reading To Kill a Mockingbird. Throughout the course, time is spent focusing on a research paper, parts of speech and grammar, reading and comprehension, and poetry. Strategies for strengthening vocabulary and grammar skills will be examined and practiced. Students will display mastery of these concepts through various learning activities and assessments, such as tests, quizzes, journal exercises, projects, and essays.

## British Literature Part 1

## English: High School English

Course Code: LI.ENG.301111.1.HO
Has Textbook: Yes
British Literature Part 1 will provide students with a survey of British literature that includes texts from the Anglo-Saxon and Medieval eras, the English Renaissance, and the Restoration and Enlightenment eras. Readings in the course include Beowulf, Chaucer's Canterbury Tales, Shakespeare's Macbeth, and Swift's Gulliver's Travels. British Literature offers students numerous chances to understand, analyze, synthesize, and evaluate the texts they read, through a wide range of writing and thinking exercises. This course will incorporate a wide variety of supplementary resources, including an online text and external links to unique activities and learning experiences. The readings for each unit will impart various themes, including historical context presented in those texts. By the end of the course, students will be able to think critically and communicate effectively with regard to the works covered in the texts and the eras encompassed by those works.

## British Literature Part 2

## English: High School English

Course Code: LI.ENG.301111.2.HO
Has Textbook: Yes
British Literature Part 2 will provide students with a survey of English texts from the Romantic Era, the Victorian Era, and the Modernist Era, as well as the mid to late 20th century (1900 C.E. present). The course is based around Holt's Elements of Literature Sixth Course textbook, with additional works found online. This course offers students numerous chances to understand, analyze, synthesize, and evaluate the texts they read through a wide range of writing and thinking exercises. The readings for each unit will impart various themes present in those texts. For instance, students will learn about Romantic poets such as Samuel Taylor Coleridge and Lord Byron. After visiting the Romantic Era, students will continue their journeys through British literature by analyzing the Victorian Era, where they will study the works of authors such as Alfred, Lord Tennyson and Robert Browning. Students will also be required to write a critical essay at the end of several units. Students will wrap up the course by studying works from both the Modernist Era and the mid to late 20th century. Additionally, this course will make use of various technologies to access and impart knowledge. This includes using information and exercises found on numerous websites that provide background and enrichment related to the readings, as well as multimedia - specifically video clips and critical essays - concerning authors and their works.

## American Literature Part 1

## English: High School English

Course Code: LI.ENG.301211.1.HO
Has Textbook: Yes
In American Literature Part 1, students are invited to travel through the various cultural periods of American literature. Students will explore American literary traditions of the nineteenth century and will study the darker side of Romanticism while exploring the horror story genre. They will read selections from Edgar Allan Poe, including "The Raven," "The Fall of the House of Usher," and "Masque of the Red Death." This course will also examine literature from the Civil War Era; stories of slavery such as an excerpt from the Narrative of the Life of Frederick Douglass; and literature from the Civil Rights Movement of the late 1800s. Students will read and analyze samples of several authors' contributions to American literature, such as Walt Whitman's "A Sight in Camp in the Daybreak Gray and Dim," and will also study post-Civil War literature pertaining to Native Americans, pioneers, settlers, and women. Students will complete the course with a deeper understanding of the major contributions literature has made in the development of our country.

## American Literature Part 2

## English: High School English

American Literature Part 2 will explore the Age of Realism, focusing on the authors Mark Twain and Bret Harte. Students will also compare and contrast works on Realism and Naturalism by focusing on the works of Jack London and Beck Weathers. Students will explore the Modern Era by reading a collection of poetry and modern American fiction works, including short stories and speeches. Students will learn about the Harlem Renaissance by reading and studying essays and poems from that era. Finally, the course will conclude with a study of the Contemporary Period, where students will read many different genres of literature, including poetry, drama, fiction, and nonfiction.

## Introduction to Mass Media

## English: Journalism

Course Code: LI.ENG.302812.0.NP
Has Textbook: No
Introduction to Mass Media, a textbook free course, will introduce students to the basics of mass media. Some key ideas explored throughout this course include the historical beginnings of various media, the business of mass media, and the importance of mass media in a democracy. The student will also develop the skills to properly critique the media.

## Sports Media and Broadcasting

## English: Journalism

Course Code: LI.SPO.300110.0.OT
Has Textbook: Yes
Course Length: 1 Semester
Sports Media and Broadcasting is a hands-on course meant to prepare students who plan to major in broadcast journalism, communications, or any other form of media in college. In this course, students will explore the foundations of the sports media, reporting techniques, and the current state of print journalism. In addition, students will become familiar with the technical side of broadcasting, the Internet's role in sports media, photography, anchoring, play-by-play, and the economics of the industry. Following the semester timeline, students will be asked to complete in-the-field projects to enhance the skills required for a career in sports media.

## Introduction to Short Stories

## English: Literature and Cultural Studies

Course Code: LI.ENG.301812.0.HO
Has Textbook: Yes
Course Length: 1 Semester
In Introduction to Short Stories, students will read various short stories and will learn about the literary elements of plot, character, point of view, and setting, as well as suspense and irony. Students will become acquainted with the compact nature of the short story literary form and each author's ability to weave exciting, interesting narratives in such short, tight spaces. Students will also learn the importance of being concise and will recognize that good literature does not necessarily have to be lengthy in order to be captivating.

## A World of Short Stories

## English: Literature and Cultural Studies

Course Code: LI.ENG.301912.0.NP
Has Textbook: No
A World of Short Stories introduces the cultural context of literature from around the globe to developing readers. In this course, students will read high-interest short stories dealing with universal themes. Pre-reading, journal exploration, and follow-up questioning provide focus on vocabulary and comprehension, as well as cultural and literary appreciation. Students are expected to keep an active reader's notebook to gain and improve skills in critical reading. This course is a perfect follow-up to Introduction to Short Stories, but it can also be enjoyed on its OWn.

## Mystery and Science Fiction

## English: Literature and Cultural Studies

Course Code: LI.ENG.302707.0.HO
Has Textbook: Yes
In Mystery and Science Fiction, students will study some of the most well-known and respected authors and stories of the mystery/detective and science fiction genres. Several literary terms and techniques will be studied and applied to the texts. The texts used for this course are The Best American Mystery Stories of the Century and Holt Anthology of Science Fiction. Through the study of works of authors such as Flannery O'Connor, Stephen King, and Arthur C. Clarke, students will gain an understanding and an appreciation of these genres. Students will learn how stories of this genre are developed, why they appeal to so many readers, and what characteristics they share. Interesting side notes about the authors, some secrets behind the stories, and facts about the exploration of these genres are also included. The course ends with students reading Robert Louis Stevenson's novel The Strange Case of Dr. Jekyll and Mr. Hyde.

## African American Literature

## English: Literature and Cultural Studies

Course Code: LI.ENG.303211.0.HO
Has Textbook: Yes
African American Literature will guide students through the various cultural periods of African American history. This course explores the narratives of Africans and African Americans whose contributions have shaped the world. In Unit 1, students will study literature relating to Africans and African Americans from prehistory to 1750. Unit 2 will cover African American poets, authors, and civil rights activits from 1750-1865, including Phyllis Wheatley, Frederick Douglass, and Sojourner Truth. Unit 3 will discuss historical and cultural changes for African Americans from 1865-1945, including the civil rights writings of Ida B. Wells and W.E.B. Du Bois, as well as the works of Langston Hughes and other figures of the Harlem Renaissance. Finally, Unit 4 includes modern selections from Martin Luther King, Jr., Malcolm X, Maya Angelou, Queen Latifah, and more. Students will be exposed to African American literature and culture from the past to the present and will learn how these literary works have been used to strive toward a better future for all African Americans.

## AP/Advanced English Literature Part 1

## English: Literature and Cultural Studies

Course Code: LI.ENG.403010.1.PE
Has Textbook: Yes
Course Length: 1 Semester
AP/Advanced English Literature is an accelerated course meant to prepare students who plan to take the Advanced Placement exam. This course meets the Advanced Placement criteria required by the College Board. In this course, students will write extensively and will apply their writing knowledge in creating several types of critical analyses, including biographical, historical, mythological, psychological, and formalist analyses. Students will also read challenging literary selections ranging from classical to modern times, such as Robert Browning's "My Last Duchess" and Kurt Vonnegut, Jr.'s "Harrison Bergeron." In this section of AP/Advanced English Literature, students will review works across the genres of short fiction and poetry. Following a rigorous semester timeline, students will also review and practice skills, techniques, and procedures to prepare them for the Advanced Placement English Literature and Composition Exam. Some of the literary works used in this course involve mature themes.

## AP/Advanced English Literature Part 2

## English: Literature and Cultural Studies

Course Code: LI.ENG.403010.2.PE
Has Textbook: Yes
Course Length: 1 Semester
AP/Advanced English Literature Part 2 is a continuation of the accelerated course meant to prepare students who plan to take the Advanced Placement exam. It also meets the Advanced Placement criteria required by the College Board. The course begins by introducing students to a wide range of British poets, starting with the metaphysical poets of the Renaissance and ending with contemporary British poets. Studies will focus on literary periods such as Gothic Romanticism, the Romantic Hero, the Victorian Age, War Poetry, and Post-Modernism. Students will continue to read challenging literary selections that span multiple genres from classical to modern times. Some examples of these works include Oedipus the King and A Midsummer Night's Dream. Students will review pieces of literature that follow a common theme, and they will also submit criticisms to demonstrate thorough comprehension. Some examples of these readings include Henrik Ibsen's A Doll's House and Ayn Rand's novella Anthem. Students are expected to write extensively in this course and to apply prior writing knowledge to their responses. Some of the literary works used in this course involve mature themes.

## Global Mythology

## English: Mythology

Course Code: LI.ENG.302209.0.NP
Has Textbook: No
Global Mythology is a textbook free course that offers students an interactive way to learn about myths from around the world. Each unit focuses on a particular region and its culture:
Europe/Greek and Roman culture; Asia/Asian culture; North and South America/Native American culture; Africa and Australia/African, Egyptian, and Australian culture. These cultures will be carefully explored and their varied myths studied. The range of myths will introduce the learners to a variety of characters such as gods, goddesses, monsters, heroes, and deities. Mythical places and sacred locations will also be examined, and relative vocabulary words will be introduced. Lessons will cover how mythology is incorporated into our western culture. Artwork, poems, and music that represent the particular culture being studied will also be incorporated. Learners will demonstrate knowledge of content through a variety of writing assignments.

## Classical Mythology

## English: Mythology

Course Code: LI.ENG.303109.0.NP
Has Textbook: No
This textbook-free course offers students an interactive way to learn about classical mythology. The course establishes a solid foundation for these studies by providing concise histories of Ancient Greece, Ancient Rome, and the European Renaissance. A variety of myths will introduce learners to many characters such as gods, goddesses, monsters, heroes, and other deities. Vocabulary that derives from Greek and Latin words will be introduced. Lessons will cover how mythology is incorporated into our western culture through the naming of planets, weeks, weekdays, and so on. Artwork, poems, and music will also be explored in terms of classical references. Learners will demonstrate their knowledge of the content through a variety of writing assignments including a compare and contrast research paper; characterization, letter, myth, and critique writing; and the creation of an advertisement and a collage.

## Introduction to Screenwriting

## English: Writing and Word Study

Course Code: LI.ENG.300907.0.OT
Has Textbook: Yes
The screenplay is the starting point for every film, whether it is a five-minute short or a full-length motion picture. The writing of scripts is a craft that takes time and dedication to master at the professional level, but the tools of both the novice and of the accomplished screenwriter are the same. In this course, students will acquire, step by step, each of those tools, the necessary skills, to create an original screenplay. This course presents a complete guide to the fundamental elements essential in every motion picture screenplay. Students will learn cinematic storytelling basics and how they are implemented in the creation of a screenplay, or a "movie blueprint." Students will examine all screenplay components, from scene creation to dialogue, to narrative flow across the length of a film. This course also prepares students to create original screenplays through full examination of all script elements and also through scriptwriting exercises and tests. The textbook provides a foundation for all the required scriptwriting basics and gives in-depth analyses of how script elements are employed in seven selected movie classics, including E.T. and Hamlet.

## Essentials of English Usage

## English: Writing and Word Study

Course Code: LI.ENG.302009.0.MH
Has Textbook: Yes
Essentials of English Usage serves as an introductory or a refresher course and covers elements of effective writing, sentence skills, parts of speech, modifiers and parallelism, punctuation and mechanics, and word usage. Students will master Standard English so they can succeed in the classroom, the workplace, college, or a technical area. Students will also build a working vocabulary throughout the course.

## Changing Language

## English: Writing and Word Study

Course Code: LI.ENG.302107.0.OT
Has Textbook: Yes
Course Length: 1 Semester
Changing Language provides a more in-depth look at the evolution of the English language and its various influences. Students will learn to identify and to comprehend borrowed vocabulary from languages such as French, Greek, and Latin. By exploring the historical context of the language and its usage, students will gain further understanding of sentence and word formation and will learn how English has evolved into its contemporary form.

## Creative Writing

## English: Writing and Word Study

Course Code: LI.ENG.302512.0.NP
Has Textbook: No
Course Length: 1 Semester
Creative Writing is a workshop course in which students discover, analyze, and apply the methods and styles used in various forms of fiction, creative non-fiction, drama, and poetry. It emphasizes experimentation, practice, and taking cues from published writers and poets. It also gives students the opportunity to express themselves while learning different genres and writing rules. Writing is a craft, a process, and a form of art in itself. Creative Writing not only provides all participants with an opportunity to express themselves, but also supplies focus on word choice, diction, form, editing, idea generation, and other skills useful in nonfiction writing. The one way to become a good writer is by writing. Students will do a great deal of writing in this course.

## Technical Writing

## English: Writing and Word Study

Course Code: LI.ENG.302907.0.PE
Has Textbook: Yes
Course Length: 1 Semester
Technical Writing will introduce and develop written communications skills specifically encountered in business and industry. This course will enable students to understand the different documents required in a business environment. Students will apply skills learned in each lesson toward perfecting their technical writing abilities. Rules that apply to grammar and mechanics are studied. Students are also given varied assessments that provide opportunities to properly format technical documents. Students will demonstrate knowledge of content through a variety of assignments, such as journal writing, e-mail, directional writing, memos, and letter writing.

## Introduction to College Writing

## English: Writing and Word Study

Course Code: LI.ENG.402607.0.PE
Has Textbook: Yes
Course Length: 1 Semester
Introduction to College Writing is designed for students who wish to pursue a post-secondary education. After successfully completing this course, students will be prepared for freshman composition. The skills covered in this course will provide a foundation for basic college writing. The primary focus is on informative and persuasive writing with attention to theses, organization, paragraphs, argumentative theories, research techniques, citation, and style. Besides the traditional essay genre, writing technique and etiquette in real-world applications such as abstracts, memos, and e-mail, as well as in other content areas, are practiced throughout.

## Pre-Algebra Part 1

## Mathematics: Algebra

Pre-Algebra Part 1 teaches students about expressions, integers, equations, inequalities, decimals, factors, fractions, exponents, ratios, proportions, and percentages. This course provides students with a solid foundation for Algebra I. Pre-Algebra Part 1 emphasizes the use of technology, problem solving, critical thinking, and reasoning.

## Pre-Algebra Part 2

## Mathematics: Algebra

Pre-Algebra Part 2 teaches students to work with equations and inequalities, linear functions and graphing, data analysis and probability, and polynomials. This course also provides students with an introduction to geometry and a solid foundation for Algebra I. Pre-Algebra Part 2 emphasizes the use of technology, problem solving, critical thinking, and reasoning.

HIGH SCHOOL

## Algebra I Part 1

## Mathematics: Algebra

Course Code: LI.MAT.302811.1.PE
Has Textbook: Yes
Course Length: 1 Semester
Algebra I Part 1 continues the exploration of variables, function patterns, graphs, and equations. Students are expected to describe and translate graphic, algebraic, numeric, and verbal representations of relations and use those representations to solve problems. Algebra I Part 1 emphasizes the use of technology, problem solving, critical thinking, and reasoning.

HIGH SCHOOL

## Algebra I Part 2

## Mathematics: Algebra

## Course Code: LI.MAT.302811.2.PE

Has Textbook: Yes
Algebra I Part 2 introduces students to rational numbers, systems of equations and inequalities, exponential functions, factoring, and quadratic equations and functions. This course provides a solid foundation for further study in mathematics by helping students develop computational, procedural, and problem solving skills. Algebra I Part 2 emphasizes the use of technology, problem solving, critical thinking, and reasoning.

HIGH SCHOOL

## Algebra II Part 1

## Mathematics: Algebra

## Course Code: LI.MAT.302511.1.PE

Has Textbook: Yes
Course Length: 1 Semester
In Algebra II Part 1, students will analyze situations verbally, numerically, graphically, and symbolically. Students will become proficient at solving equations and inequalities. They will extend their knowledge of algebraic expressions, absolute value, functions, and graphs. Students will also learn to write and graph linear equations and inequalities and study problems that solve systems of equations, inequalities, quadratic expressions, and complex numbers.

HIGH SCHOOL

## Algebra II Part 2

## Mathematics: Algebra

## Course Code: LI.MAT.302511.2.PE

Has Textbook: Yes
Course Length: 1 Semester
Algebra II Part 2 continues to build on the algebraic foundations learned in Algebra II Part 1. The course also covers rational expressions, roots and radicals, operations with complex numbers, and quadratic equations. In addition, students explore trigonometric functions, sequences and series, probability, and matrices.

## Geometry Part 1

## Mathematics: Geometry

Geometry Part 1 investigates points, lines, planes, reasoning and proof, parallel and perpendicular lines, relationships within triangles, and quadrilaterals. Technology is stressed and integrated into lessons and exercises throughout the course in order to improve students' overall understanding and performance of geometric concepts.

## Geometry Part 2

## Mathematics: Geometry

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Course Code: LI.MAT.301311.2.PE
Has Textbook: Yes
Course Length: 1 Semester
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Geometry Part 2 investigates similarity, right triangles and trigonometry, transformations, area, surface area, volume, and circles. A main purpose of the study of geometry is the development of reasoning ability. Geometry Part 2 emphasizes this focus through the use of technology, problem solving, and critical thinking.

## Pre-Calculus Part 1

## Mathematics: Calculus

Course Code: LI.MAT.301810.1.ML
Has Textbook: Yes
In Pre-Calculus Part 1, students develop a deeper understanding of functions and their graphs. The function types covered in depth in this course include polynomial, rational, exponential, logarithmic, and trigonometric. Topics covered in relation to polynomial and rational functions include complex numbers, zeroes of polynomial functions, and synthetic division. Some exponential and logarithmic topics discussed are change of base formulas, properties of logs, growth and decay, and logistic growth models. Pre-Calculus Part 1 concludes with the unit circle, trigonometric functions, and their inverses.

## Pre-Calculus Part 2

## Mathematics: Calculus

Course Code: LI.MAT.301810.2.ML
Has Textbook: Yes
Course Length: 1 Semester
Pre-Calculus Part 2 begins with trigonometry topics such as identities, trigonometric equation solving, half-angle and double-angle formulas, the law of sines, and the law of cosines. Students solve linear equalities and inequalities in two and three variables using graphing and algebraic techniques (i.e. substitution, row-echelon, and Gaussian elimination). Infinite series, partial sums of series, and geometric series are introduced and limits are studied. Statistical concepts include probability, the counting principle, and the Binomial Theorem. The course concludes with an indepth study of conics (i.e. parabolas, hyperbolas, and ellipses).

## Calculus Part 1

## Mathematics: Calculus

Course Code: LI.MAT.402012.1.CE
Has Textbook: Yes
Course Length: 1 Semester
Calculus Part 1 explores higher-level mathematics through analytical/algebraic, numerical, graphical, and verbal methods. Students will study functions, graphs, limits, differentiation, applications of derivatives, as well as exponential and logarithmic functions.

HIGH SCHOOL

## Calculus Part 2

## Mathematics: Calculus

Course Code: LI.MAT.402012.2.CE
Has Textbook: Yes
Course Length: 1 Semester
In Calculus Part 2, notation for antiderivatives and indefinite integrals will be explored and the basics of integration are introduced. Students will also investigate trigonometric functions, probability, series, and Taylor polynomials.

## AP/Advanced Calculus Part 1

## Mathematics: Calculus

Course Code: LI.MAT.400111.1.PE
Has Textbook: Yes
AP/Advanced Calculus Part 1 teaches a balanced approach to problem solving, using analytical, algebraic, numerical, graphical, and verbal/written methods of representing problems. This course begins with a brief review of linear, polynomial, exponential, parametric, logarithmic, and trigonometric functions. Students will study all topics associated with limits and continuity. Student will also study derivatives of a variety of functions (i.e., polynomial, trigonometric and inverse trigonometric, exponential, and logarithmic), as well as learn how to apply the chain rule and implicit differentiation. The course closes with a study of extreme values and the Mean Value Theorem.

This course meets the Advanced Placement criteria required by the College Board.
*Note: AP/Advanced Calculus Parts 1 and 2 are required for the AP Calculus AB exam.

## AP/Advanced Calculus Part 2

## Mathematics: Calculus

Course Code: LI.MAT.400111.2.PE
Has Textbook: Yes
AP/Advanced Calculus Part 2 begins with additional topics related to derivatives, specifically first and second derivatives and their graphs. The study of derivatives concludes with optimization, linearization, and related rates. Students will study definite integrals and area under a curve. The topics include antiderivatives, the Fundamental Theorem of Calculus, the trapezoidal rule, slope fields, and antidifferentiation by substitution. The course concludes with the application of definite integrals. Students will study the integral as an accumulation function, the area under a curve, and the volume of a surface of revolution.

This course meets the Advanced Placement criteria required by the College Board.
*Note: AP/Advanced Calculus Parts 1 and 2 are intended to prepare students for the AP Calculus AB exam.

## AP/Advanced Calculus Part 3

## Mathematics: Calculus

Course Code: LI.MAT.400111.3.PE
Has Textbook: Yes
Course Length: 1 Semester
AP/Advanced Calculus Part 3 prepares students for the BC part of the AP Calculus exam and meets the Advanced Placement criteria required by the College Board. AP/Advanced Calculus Part 3 builds on the concepts learned in AP/Advanced Calculus Parts 1 and 2. Students will study limits in indeterminate forms, L'Hôpital's Rule, growth rates of functions, and indefinite integrals. Also, students will study a variety of sequences and series, polynomials of infinite degree, and their derivatives and integrals. Taylor series and MacClaurin series, as well as tests for convergence and divergence, will be covered. The course closes with parametric functions, vectors, and polar coordinates.

## Trigonometry

## Mathematics: Trigonometry

Course Code: LI.MAT.300712.0.CE
Has Textbook: Yes
Course Length: 1 Semester
In Trigonometry, students will gain a solid understanding of the fundamentals of trigonometry and the real-world applications of these principles in science, technology, and engineering. Lessons will provide step-by-step guidance through procedures and solutions, providing clear examples for each type of problem. Students will explore concepts from radian and degree measurement to unit circles and trigonometric functions and sine and cosine functions. This course is geared to students in grades 10-12 with an interest in pursuing engineering-related coursework.

## Applied Mathematics Part 1

## Mathematics: Practical Applications

Applied Mathematics Part 1 covers the fundamental mathematics necessary for students to obtain a broad range of skills. Although problems in this course apply to a variety of areas, the emphasis has been given to applications in the building construction field.

## Applied Mathematics Part 2

## Mathematics: Practical Applications

Applied Mathematics Part 2 introduces students to all phases of carpentry construction. Students are asked to solve a wide range of calculations used every day by engineers and construction workers.

## Business Math Part 1

## Mathematics: Practical Applications

Course Code: LI.MAT.301607.1.MH
Has Textbook: Yes
Course Length: 1 Semester
In Business Math Part 1, students learn the various aspects of consumer-oriented business practices, including how to keep financial records and calculate pay rates, benefits, and commissions. Also, borrowing, saving, and investing money are discussed. Practice problems in this course promote proficiency in dealing with everyday mathematical transactions.

## Business Math Part 2

## Mathematics: Practical Applications

Course Code: LI.MAT.301607.2.MH
Has Textbook: Yes
Course Length: 1 Semester
Business Math Part 2 introduces students to mathematical applications in typical business situations and provides an understanding of how a business functions.

## Consumer Math Part 1

## Mathematics: Practical Applications

Consumer Math Part 1 shows students how math is used in everyday life. The course instructs students to calculate earnings from a job, shop for and work with food, buy clothing, manage a household, buy and maintain a car, and helps students understand interest rates and car insurance premiums. Also, this course reinforces basic mathematical skills, including dividing, multiplying, adding and subtracting integers, working with one-step equations, and percentages.

## Consumer Math Part 2

## Mathematics: Practical Applications

Consumer Math Part 2 is a comprehensive course focusing on consumer applications of math. It utilizes problem solving strategies and alternate methods of computation to solve a wide range of consumer problems. The course will cover home improvement costs, travel expenses, budgets, taxes, banking, and investing.

## Practical Math Part 1

## Mathematics: Practical Applications

Course Code: LI.MAT.301512.1.CE
Has Textbook: Yes
In Practical Math Part 1, students will learn valuable math concepts that they will use in their daily lives. They will learn addition, subtraction, multiplication, and division of whole numbers, as well as fractions and decimals. This course will also teach students how to work with ratios, proportions, and percents. Throughout the course, word problems will relate concepts to practical solutions. This course covers basic math skills, placing a strong emphasis on practice and application.

## Practical Math Part 2

## Mathematics: Practical Applications

Course Code: LI.MAT.301512.2.CE
Has Textbook: Yes
Practical Math Part 2 covers basic math skills, placing a strong emphasis on practice and application. Students will learn math skills for business and consumers, the basics of statistics and measurement, and integers. The course will also focus on problems involving signed numbers and solving equations. In addition, basic geometric concepts, including perimeter, area, volume, and circumference, will be discussed. Word problems are used to relate concepts and practice solutions. In this course, students will learn valuable math concepts that they will use in their daily lives.

# PSSA Mathematics (Pennsylvania System of School Assessment) 

## Mathematics: Test Preparation

Course Code: LI.MAT.301707.0.NP
Has Textbook: No
Course Length: 1 Semester
In this course, students focus on evaluating and analyzing their strengths and weaknesses in mathematics based on the PSSA assessment anchors. The students are provided with video instruction, targeted skills practice, and developmental exercises in order to strengthen any weak areas in mathematics. The topics covered in this textbook-free course include number systems, computation, estimation, measurement, statistics, probability, algebra, geometry, and basic concepts of calculus. This course reviews these subject areas to provide strong preparation for the math PSSA.

## Astronomy Part 1

## Science: Astronomy

Course Code: LI.SCI.301612.1.CE
Has Textbook: Yes
Students will begin Astronomy Part 1 by taking an in-depth look into the night sky. Students will learn about the stars, constellations, and the phases of the Moon. This course will then discuss the cycles of the Sun, which influence the Earth's climate. Students will become familiar with the origin of modern day astronomy as they learn about modern methods of measurement and observation, ground-based and space-based astronomy, and ancient instruments and techniques for observation. The course will continue with a closer look at the Sun and stars. This section of the course will concentrate on solar activity, classification of stars, star formation, and the death of a star. Astronomy Part 1 will incorporate the use of interactive labs and a textbook.

## Astronomy Part 2

## Science: Astronomy

Course Code: LI.SCI.301612.2.CE
Has Textbook: Yes
Part 2 of Astronomy takes a step outside planet Earth and takes an in-depth look at the discovery and exploration of the Milky Way galaxy. Students will analyze the Big Bang theory and evidence that supports the creation of our solar system. Students will then explore the creation and properties of terrestrial and gaseous planets, and they will recognize what makes each planet unique. Lastly, students will explore foreign bodies of the solar system, such as meteors, asteroids, comets, and asteroid and comet impacts. This course will utilize interactive labs and a textbook.

## Mysteries of the Solar System

## Science: Astronomy

Course Code: LI.SCI.401607.0.PE
Has Textbook: Yes
Mysteries of the Solar System is an advanced course that employs an in-depth study of solar system topics and their particulars. Some of the information covered in the course will be similar to and will build upon the information covered in Astronomy Part 1. Mysteries of the Solar System serves as a prerequisite for Exploring the Universe. In this course, students will rigorously explore the study of astronomy by focusing on topics such as constellations, seasonal changes, time zones, phases of the Moon, and eclipses. The models of Aristotle, Ptolemy, and Copernicus will be compared and contrasted. Students will also study a variety of instruments astronomers use, including a celestial sphere and, more importantly, the telescope. Various types of telescopes will be discussed, as well as their advantages and disadvantages. Students will then trace the space program from its origins to the modern day. This will lead into the study of both the formation and the composition of terrestrial planets, Jovian planets, comets, asteroids, and meteoroids. This course will also cover the effect the Moon and Sun have on the Earth, including a study of the Sun's surface composition, temperature, magnetic field, and solar activity.

## Explore the Universe

## Science: Astronomy

Course Code: LI.SCI.401707.0.PE
Has Textbook: Yes
Throughout this course, students will rigorously explore the properties of stars, which include luminosity, brightness, size, distance to the star, and how these properties are measured. Students will also learn how to use this information to construct an $\mathrm{H}-\mathrm{R}$ diagram. Continuing the study of stars, students will take an in-depth look into the formation, evolution, and violent death of stars. The final units will discuss characteristics of several types of galaxies including spiral, barred, elliptical, and irregular. Students will also explore the theories behind the formation and evolution of galaxies. Our own galaxy will also be studied in detail. This is an advanced course that employs an in-depth study of its topics and their particulars.

## General Biology Part 1

Science: Biology
Course Code: LI.SCI.301411.1.PE
Has Textbook: Yes
Course Length: 1 Semester
General Biology Part 1 allows students to experience the pleasure of learning about the world of living things. Through the study of biology, students will come to appreciate the great diversity of life on Earth and the way all living organisms fit into the dynamic pattern of life. One of the most fundamental principles of biology is that living things, including human beings, do not exist in isolation; they are all functioning parts in the delicate balance of nature. This course will utilize interactive labs and a textbook.

## General Biology Part 2

Science: Biology
Course Code: LI.SCI.301411.2.PE Has Textbook: Yes

General Biology Part 2 will begin by discussing the microscopic forms of life known as viruses, bacteria, and fungi. After gaining an understanding of the simpler forms of life, students will move on to discuss the higher forms of life represented by the plants and animals. Students will begin with a general focus on the uncomplicated forms of life from each kingdom and move on to the more complex. This course includes online lessons and textbook reading.

## Biology Part 1

## Science: Biology

Biology Part 1 will introduce students to the diversity and complexity of living things, as well as the chemical basis of life and the importance and function of chemical reactions in living things. Students will begin their journey by focusing on the molecular basis of life, followed by the study of cellular structures and functions. Students will investigate photosynthesis, cellular respiration, and modes of reproduction in addition to genetics and the interdependence of living things. Within each unit, students will also complete various lesson activities designed to provide additional information. Students in this course will also complete a water-lab, which is an indepth look at the properties of water in solutions and ways in which water reacts with other substances.

## Biology Part 2

## Science: Biology

Biology Part 2 will allow students to describe Mendel's plant breeding experiments. Students will then explore the many variations of inheritance patterns, summarize the chromosome theory of inheritance, identify the building blocks of DNA, and describe the process of DNA replication. Students will also investigate the advancements of biotechnology and the organisms of the domains and kingdoms.

## Advanced Biology Part 1

## Science: Biology

Course Code: LI.SCI.401907.1.PE
Has Textbook: Yes
Course Length: 1 Semester

Advanced Biology is an accelerated course. The Advanced Biology curriculum is organized to mirror a twosemester introductory college biology course for biology majors. The course is designed to cover topics required in a college biology course and will utilize a textbook used by students in a biology major. This course includes 12 required lab activities that supplement the class materials and required topics. Together with the required reading and classroom interactions, such as discussion board collaboration, the laboratory activities support the overall goal of the program. This goal is to provide students with the factual understanding and critical thinking ability to thrive in the ever-changing environment of modern biology. This course will begin with the study of the chemistry of life, molecular diversity, and cellular biology. Students will also examine phylogeny, taxonomy, and the diversity of life through various forms of reproduction and cell division. Finally, students will analyze the physiological diversity of animals related to their adaptations to the changing ecological surroundings.

## Advanced Biology Part 2

## Science: Biology

## Course Code: LI.SCI.401907.2.PE

Advanced Biology Part 2 is a continuation of the accelerated introductory biology course. Advanced Biology Part 2 will commence with Mendelian principles of genetics and the molecular biology of DNA and RNA, as well as biotechnology. Students will examine Darwin's theory of evolution, speciation, macroevolutionary change, as well as the evolution of plants. Students will study botany along with behavioral, community, and population ecology. Although this is not a College Board-approved advanced placement course, students may still take the AP Exam on their own if they desire. This course concludes with a preparatory review for the AP Biology Exam.

## Chemistry Part 1

## Science: Chemistry

Course Code: LI.SCI.301211.1.PE
Has Textbook: Yes
Chemistry Part 1 will explore many aspects within the subject of chemistry. Students will begin by investigating matter, atomic structure, and the periodic table. The learners will then explore the role of electrons with respect to ionic, metallic, and covalent bonding. Students will also demonstrate the ability to name and to write formulas for ionic compounds, molecular compounds, and acids and bases. Finally, students will analyze mole-mass relationships and mole-volume relationships. In addition to virtual experiences, the lessons in this course will provide students with hands-on lab experience through various inquiry activities and mini-labs that can easily be performed in the home. These experiences encourage skills necessary for critical thinking. This course includes a virtual chemistry lab CD.

## Chemistry Part 2

## Science: Chemistry

Chemistry Part 2 will continue to explore many chemistry topics in depth. Students will begin by investigating subjects such as chemical reaction, stoichiometry, and the different states of matter. The learners will then explore the behavior of gases, aqueous systems, and solutions. Students will continue their study of chemistry by focusing on thermochemistry, reaction rates, and equilibrium. Finally, students will analyze acid and base theories, as well as oxidationreduction reactions. This course includes a virtual chemistry lab CD.

## Fundamentals of Ecology

## Science: Earth Science

Fundamentals of Ecology explores the basic concepts of ecology. Students will investigate the many different systems in the environment that make up the world around us. Habitats, biomes, and energy resources are among the topics of discussion. Current case studies and online activities are used to bring the subject matter to life. Fundamentals of Ecology will touch upon ways that humans can influence the environment, which makes it a great precursor to the Environmental Science course.

## Earth Science Part 1

## Science: Earth Science

Earth Science Part 1 covers many aspects of Earth science, including the nature of scientific investigation, Earth's matter and composition, Earth's chemistry, the history of the Earth, and the dynamics of Earth's changing surface. This course will introduce concepts such as Earth's revolution and rotation, as well as the advantages and disadvantages of various renewable and nonrenewable resources. Students will explore rocks and minerals, plate tectonics, volcanoes, earthquakes, weathering, and erosion. Students will also relate key concepts of Earth Science to everyday life.

## Earth Science Part 2

## Science: Earth Science

Earth Science Part 2 covers freshwater systems on the Earth, the Earth's atmosphere, oceanography, and astronomy. Students will begin by examining the Earth's river systems, groundwater, and glaciers. Then, students will explore Earth's atmosphere, including its composition, movement of heat, compounds, and water vapor. Students will compare the formation of various types of clouds and patterns of air circulation, while also examining the Earth's weather by identifying air masses, fronts, and storms. In studying oceanography, students will explore the Earth's oceans, the properties of salinity, the composition of the ocean floor, and the features of currents and tides. Finally, students will study astronomy by exploring the moon, sun, and solar system, as well as distant stars and galaxies. Students will demonstrate knowledge of key concepts of Earth science and will understand how these concepts relate to their everyday lives.

## Environmental Science

## Science: Earth Science

Environmental Science will introduce students to the scientific method, terrestrial and aquatic ecosystems, biomes of the world, trophic interactions, and nutrient and chemical cycles. Students will discuss the various forms of energy, including both renewable and nonrenewable resources. Students will learn ways in which humans can use the land and will also explore the impact humans have on the environment. Students will study ways in which humans can reduce negative environmental consequences. Additionally, students will have the opportunity to learn about numerous environmental issues, laws, and policies.

## Physical Science Part 1

## Science: Physical Science

Course Code: LI.SCI.301311.1.PE
Has Textbook: Yes
Physical Science will introduce two areas of study - chemistry and physics. In Part 1 of this course, students will study chemistry. Throughout their studies, students will investigate topics surrounding matter, atomic structure, bonds, chemical reactions, and the periodic table.

## Physical Science Part 2

## Science: Physical Science

Physical Science Part 2 is designed to introduce two areas of study - chemistry and physics. The second section of this course entails a concentration on physics. Students will investigate topics involving motion, forces, energy, waves, and electricity. Introduction to Algebra and/or Pre-Algebra is a suggested prerequisite for this course.

## Introduction to Physics Part 1

## Science: Physics

Course Code: LI.SCI.301012.1.MO
Has Textbook: Yes
Introduction to Physics Part 1 will introduce students to algebra-based physics. In this textbookfree course, students will begin by learning the fundamentals of the subject, including topics such as units and basic problem solving. The course will cover concepts such as mass, acceleration, velocity, motion, forces, and machines. Student will then be introduced to Newton's Laws of Motion and will learn to apply them to a variety of situations. This course will then incorporate the energy perspective into the study of motion, introducing students to the important concepts of work, energy, and power. The discussion includes potential energy, the concepts of linear momentum, and impulse. Finally, students will examine the basics of rotational motion.

## Introduction to Physics Part 2

## Science: Physics

In Part 2 of this textbook-free course, students continue to explore physics through the study of gravity, projectile motion, and Kepler's Laws of Planetary Motion. Students will also study the nature of matter and atomic structure to learn how the laws of physics apply on an atomic level. The knowledge of forces gained in Part 1 will be applied to liquids and gases to discover how these states of matter behave. Students will then be introduced to thermodynamics, mechanical and electromagnetic waves, and the Doppler Effect. The course will finish with a look at electricity, magnetism, and optics, including a study of mirrors and lenses.

## Physics Part 1

## Science: Physics

Course Code: LI.SCI.401807.1.PE
Has Textbook: Yes
Course Length: 1 Semester
Physics Part 1 will introduce students to the fundamentals of algebra-based physics through an exploration of mechanics. Some topics covered include one-dimensional and two-dimensional kinematics, vectors in physics, and Newton's Laws of Motion and their applications.

## Physics Part 2

## Science: Physics

Course Code: LI.SCI.401807.2.PE
Has Textbook: Yes
Course Length: 1 Semester
Physics Part 2 will incorporate the energy perspective into the study of motion. Students will be introduced to the important concepts of work and energy before moving on to study the concepts of potential energy, linear momentum, and impulse. Finally, students will examine the basics of rotational motion.

## Civics Part 1

## Social Studies: Civics and Government

Civics Part 1 will introduce students to our democratic system of government and the ideals upon which it was founded. Students will gain an understanding of what it means to live in a democracy and what rights and responsibilities go along with this form of government. Students will study the United States Constitution as well as the three main branches of government. In addition, students will learn about state and local governments as well as juvenile and adult court systems.

## Civics Part 2

## Social Studies: Civics and Government

## Course Code: LI.SOC.301511.2.HO

Has Textbook: Yes
Civics Part 2 is designed to relate the importance of being an active participant in American society through the interaction of the individual within the family, school, community, and legal system. This course will also describe how the American economic system works, the importance of goods and services, and how to manage money and choose a career. Students will learn how the United States deals with economic challenges, especially those relating to the emergence of a world economy. This course will also explain how the United States chooses a path to follow for its foreign policy.

## Government Part 1

## Social Studies: Civics and Government

Course Code: LI.SOC.302210.1.PE
Has Textbook: Yes
Government Part 1 will give students a basic understanding of how the United States government works. It will introduce students to the American government by way of detailed discussions of the origins, functions, and various forms of government; the principles and foundations of democracy; the historical background of the U.S. government; and the rights and responsibilities afforded by the U.S. Constitution. Students will learn about the three branches of the Federal Government. The course will describe the various roles of Congress, which include the making of laws, Congress's powers, and its sessions and terms. Students will examine nomination and election processes, presidential powers, and the federal bureaucracy. Students will also learn about the judicial branch of the government, with discussions on the role of the courts, the national court system, and the Supreme Court and its appointment process. The course will close with lessons on state and local governments, as they are an essential component of government in everyday life.

## Government Part 2

## Social Studies: Civics and Government

Government Part 2 will begin with a discussion of the United States legal system and the role of police, courts, and the corrections system. Students will learn about rights and freedoms including freedom of religion, freedom of speech and press, freedom of assembly and petition, and various interpretations of those rights. This course will also discuss the path to citizenship in the U.S., the rights of aliens, and the protection of those civil rights. Students will then move on to learn about the U.S. political system, political parties, and political processes at the federal, state, and local levels. They will compare the political and economic systems of capitalism, socialism, and communism, and will analyze the role of the United States in international relations.

## Economics Part 1

## Social Studies: Economics

Course Code: LI.SOC.301607.1.PE
Has Textbook: Yes
Basic economic theory and its effects on everyday life are the foundation of Economics Part 1. Students will learn about basic economic features such as scarcity, opportunity cost, efficiency, and trade-offs as well as the factors of production, which are land, labor, and capital. Students will gain an understanding of the free market system in relation to other economic systems. Considerable focus will be put on the laws of supply and demand. In addition, students will explore various types of market structures and the government's involvement in these structures.

## Economics Part 2

## Social Studies: Economics

Course Code: LI.SOC.301607.2.PE
Has Textbook: Yes
Course Length: 1 Semester
Economics Part 2 will provide the learner with an opportunity to explore the world of money, banking, and finance; understand how economic performance is measured; examine the ways that the government obtains and spends resources; and analyze international trade and economic development.

## World Geography Part 1

## Social Studies: Geography

Course Code: LI.SOC.301707.1.HO
Has Textbook: Yes
Course Length: 1 Semester
World Geography Part 1 will introduce the basic tools and information geographers use to make connections between people, places, and the world around us. Students will study both physical and human geography. Topics discussed include the themes and elements of geography and the use of maps, natural environments, climates, and natural resources. Students will also learn how culture, religion, government, and the economy shape human geography. These topics will be used to examine North America, Central America, and South America.

## World Geography Part 2

## Social Studies: Geography

In World Geography Part 2, students will continue their investigation of people, places, and the world around them beyond the Americas. By incorporating both physical and human geography, students will examine the areas of Europe, Russia and Northern Eurasia, Southwest Asia, Africa, South Asia, East and Southeast Asia, and the Pacific World. Students will compare and contrast these areas by looking not only at physical features, but also at various aspects of culture, religion, government, and the economy.

## Fundamentals of Law

## Social Studies: Law

Course Code: LI.LAW.300109.0.NP
Has Textbook: No
Fundamentals of Law is a course that explores the laws that average Americans encounter during their everyday lives. The course begins by examining the roots of the American legal system from the Magna Carta through the Constitutional Convention and discusses the early government of the United States. Later in this course, students will explore the criminal law system. They will compare the federal criminal system to the state criminal system in addition to learning about crimes against people such as homicide, assault, burglary, and arson. Students will then study the roles of lawyers in criminal court cases. In the final units of this course, students will redirect their focus to learn about consumer laws, rights, and obligations. Contemporary issues such as drug and alcohol abuse, gang violence, online crimes, and same-sex marriage will be discussed.

## Introduction to Law

## Social Studies: Law

Course Code: LI.LAW.300209.0.MH
Has Textbook: Yes
Course Length: 1 Semester
Introduction to Law will offer students the opportunity to explore all aspects of the United States legal system, from its fundamental ideas to its guiding principles. The emphasis throughout the course will be to examine the reasons why a society and its members must adhere to the legal system while thinking critically and evaluating tenets of the law. This course serves as the prerequisite for Criminal and Consumer Law.

## Criminal and Consumer Law

## Social Studies: Law

Course Code: LI.LAW.300309.0.MH
Has Textbook: Yes
Course Length: 1 Semester
Criminal \& Consumer Law is designed to help students understand various laws that will touch their lives. The course covers the practical aspects of criminal and consumer laws, with an emphasis on individual rights. Students will gain important knowledge about the law, in general, and its role in protecting them as citizens and consumers.

## Psychology

## Social Studies: Social Sciences

## Course Code: LI.PSY.300110.0.HO

Has Textbook: Yes
Course Length: 1 Semester
Psychology, the science that reflects people's need to explain and control their behavior, will be explored in depth in this course, which includes extensive readings, various tests, research projects, and writing assignments. Topics will include physical, psychological, and personality development from birth to death, learning processes, and numerous - and often conflicting theories on almost all subject areas covered.

## Sociology

## Social Studies: Social Sciences

Course Code: LI.SOC.301307.0.HO
Has Textbook: Yes
Course Length: 1 Semester
Sociology is the study of our society, human social behavior, and the forces that shape them. Students will examine these concepts through a study of the various perspectives within the science of sociology. From the historical and philosophical origins of the science to the forces and challenges that shape our social institutions, this course will provide students with a deeper understanding of themselves and the world around them.

## Kansas History

## Social Studies: United States History

Course Code: LI.SOC.202411.0.NP
Has Textbook: No
In this two-unit course about the history of Kansas, students will learn about the geography of the state, the culture of Native Americans who have inhabited the land, and early settlements.
Important aspects of the state's history will be covered, including the Missouri Compromise, the Compromise of 1850, and the Kansas-Nebraska Act. The early government of Kansas will also be discussed, in addition to the Progressive Movement and the state's history during World War I and World War II. Students will learn about the landmark Supreme Court case, Brown v. Board of Education, and the significance of the Court's decision on racial segregation in public schools. The course ends with a look at the state of Kansas today.

## African American History

## Social Studies: United States History

## Course Code: LI.SOC.300111.0.HO

Has Textbook: Yes
African American History is a survey course that spans the history of America. Students will begin by learning about ancient African society and culture. Their studies will take them through history to the presidency of Barack Obama. Students will explore African traditions as they were passed down from generation to generation. Students will examine the brutal institution of slavery and, through primary source readings, will follow the history of slavery through the American Civil War. Other topics include Reconstruction, Jim Crow laws, and the Civil Rights Movement. Students will comprehend the long struggle African Americans have endured to secure their constitutional rights. The goal of this course is to show the powerful and influential role of African Americans in U.S. history.

## American History Part 1

Social Studies: United States History
Course Code: LI.SOC.300912.1.HO
Has Textbook: Yes
American History Part 1 is designed to help students understand and interpret the history of the United States. The course will begin by examining the rise of modern America due to the effects of industrialization. This course will deal with the vast scope of complex issues that have shaped America throughout its history. Some of the topics that will be examined are the Progressive Era, American Imperialism, World War I, and the Great Depression. The course will end with the beginning of World War II. Students will learn about these prominent national events as well as historical milestones around the world. Students will use Internet projects in this course to enhance their learning experiences.

## American History Part 2

Social Studies: United States History
Course Code: LI.SOC.300912.2.HO
Has Textbook: Yes
Course Length: 1 Semester
American History Part 2 will help students understand and interpret the history of the United States. The course will begin with the Holocaust and World War II and move through time to the Cold War, the Civil Rights Movement, the Vietnam War, the Post-Vietnam Era, ending with the present. This course will deal with a vast scope of complex issues throughout American history.

## Pennsylvania History

## Social Studies: United States History

Course Code: LI.SOC.301411.0.HO
Has Textbook: Yes
Course Length: 1 Semester
Pennsylvania History will broaden the student's view of the state of Pennsylvania. The course will uncover the different regions, water forms, resources, and inhabitants of Pennsylvania. It will also discuss how Pennsylvanians have many different cultures and religions. This course will take the student back to the days of the early settlers of Pennsylvania and will move through time to discuss contemporary Pennsylvanians, including their economics, values, religions, and government.

## 1960s America

## Social Studies: United States History

Course Code: LI.SOC.302307.0.PE
Has Textbook: Yes
Have you ever wondered what life was like in the 1960s? This course will let students experience the time in which their parents and grandparents lived. It will cover the social, political, and cultural movements and changes that occurred during the decade. Some of the topics explored within this course include the transition from the Happy Days to the Radical Movement, the Vietnam War, and civil rights. The course also focuses on significant headlines of the 1960s that include the assassinations of Robert Kennedy, President John F. Kennedy, and Dr. Martin Luther King, Jr. as well as the Space Race, music of the 1960s, and the effects of pop culture. In addition, students will be able to apply and further what they have learned by interviewing neighbors and relatives who lived through the examined time period and events.

## New Mexico History

## Social Studies: United States History

Course Code: LI.SOC.302507.0.OT
Has Textbook: Yes
Course Length: 1 Semester
New Mexico History is a survey of the land and the people of the unique state of New Mexico. After learning about the ecology and geography of New Mexico, students will take an in-depth look at the people who have lived in the state in the past and those who still do today. Beginning with the Paleo-Indian inhabitants, the course moves through the life and times of the early Native Americans, the Spanish settlement, Mexican and American conflicts, statehood, and the current state of economics, government, and environment. Primary focus is placed on the people's experiences and how historic events have shaped modern-day New Mexico. Cultural aspects of craft, art, literature, and folklore are highlighted as the timeline progresses.

HIGH SCHOOL

## World History Part 1

## Social Studies: World Cultures

Course Code: LI.SOC.301011.1.PE
Has Textbook: Yes
Course Length: 1 Semester
Students in World History Part 1 will learn about the events, people, and places from the year 1500 A.D. to the contemporary world. They will learn about world history by exploring its relevance; by studying living history; and by identifying the significance of a person, place, or event. In this wide-ranging course, students will learn how the world and its inhabitants were shaped over time, and, in the process, will gain a better understanding of the role that geography plays in world history. The historical tools covered in this course will help students foster an appreciation for the history in which they are living. History is only useful if we study the past to learn for the future.

## World History Part 2

## Social Studies: World Cultures

World History Part 2 will allow students to analyze the events, people, and places from the early 1900s to the modern day world. This course focuses on world events including World War I, the Great Depression and its effects on the world, and World War II. Post-World War II Asian successes and challenges are discussed in addition to Africa's independence and challenges. Students will also learn about nationalism, war and peace in the Middle East, modern day Latin and South America, and the end of the Cold War.

## Western Heritage

## Social Studies: World Cultures

Course Code: LI.SOC.301807.0.PE
Has Textbook: Yes
Course Length: 1 Semester
Western Heritage explores the development of Western civilization, beginning in early recorded times. Topics range from the fall of the Roman Empire to the end of the Middle Ages, from 450 to 1500 A.D. Students are invited to participate in a centuries-long journey encompassing one of the most interesting periods in world history.

## Ancient History

## Social Studies: World Cultures

Course Code: LI.SOC.302007.0.HO
Has Textbook: Yes
Course Length: 1 Semester
Ancient History will introduce students to and familiarize them with contributions in art, music, literature, religion, and philosophy from various civilizations. This course also addresses a variety of other accomplishments in ancient history including the institutions of government and education as well as important developments in science and technology. Cultures studied include the ancient civilizations of Asia, Africa, Europe, and the Americas.

## World Cultures Part 1

## Social Studies: World Cultures

Course Code: LI.SOC.302612.1.HO
Has Textbook: Yes
World Cultures Part 1 will explore the geography, history, and cultures of the world. During the course of the semester, students will learn how the earliest civilizations developed in each region of the world and how these regions evolved up until the Age of Exploration and the Industrial Revolution. In each unit, students will study the major powers for each historical era. The course will begin with a discussion of the first river valley civilizations that developed in the Middle East, South Asia, East Asia, and North Africa and will focus on pre-history up to 200 B.C. The focus will then move to the Classical Era up to 700 A.D. and will be followed by the exploration of the major empires during the Middle Ages up to 1500 A.D. Students will complete Part 1 of this course by studying the interaction between the different hemispheres up to 1800 A.D.

## World Cultures Part 2

## Social Studies: World Cultures

In World Cultures Part 2, students will continue to examine the geography, history, and culture of the world beginning with the absolutist kings of the 1500s and ending with modern-day world culture. In each unit, students will study the major powers for each historical era. The course will begin with a discussion of Europe's absolutist kings, revolutionary movements, and the Age of Enlightenment. Next, students will turn their attention to the Industrial Revolution and to the European empire-building in Africa and Asia. The course will then move to an examination of a world at war and will cover the Great War, nationalist movements in Russia and Asia, and World War II in addition to the Cold War, Third World independence, and struggles for democracy. The course will end by exploring current global issues such as terrorism, technology, and the global economy. Upon completion of this course, students will have gained a well-rounded, informed understanding of the world around them.

## World Religions

## Social Studies: World Cultures

World Religions will offer learners the opportunity to explore and acquire knowledge on the religions practiced and observed around the world. The course will focus on "The Big Five" (Judaism, Christianity, Islam, Buddhism, and Hinduism) and will also explore the ideas of other religions. The purpose of the course is to gain an understanding, acceptance, and appreciation for religion without evangelizing and/or proselytizing. In other words, this course will not attempt to evaluate the religions presented here in an attempt to place a judgment value on or to criticize any particular faith. The course will not seek to promote, denounce, or convert a student to a particular faith or belief. The information given in this course is factual information. It does, however, provide instances where those facts can be interpreted differently. These facts and interpretations do not necessarily reflect the views and opinions of Lincoln Interactive.

## Chinese I Part 1

## World Languages: Chinese

## Course Code: LI.WLC.301309.1.QU

Has Textbook: Yes
Course Length: 1 Semester
Chinese I Part 1 is an introductory course to Modern Standard Chinese, which includes the spoken language Mandarin and the written language of simplified characters. Students will also learn the basics of Pinyin for pronunciation purposes. This course introduces a beginner's vocabulary of Chinese characters using scenario-based examples. Students will also get a glimpse of Chinese tradition and society through cultural tips.

HIGH SCHOOL

## Chinese I Part 2

## World Languages: Chinese

Course Code: LI.WLC.301309.2.QU

Has Textbook: Yes
Course Length: 1 Semester
In this course, students will continue to expand their vocabulary, using new words in both dialogue and writing assignments. Topics covered in Part 2 include food, transportation, calling friends, date and time, the four seasons, holidays, and travel. Students will also build upon their grammatical skills while reviewing such concepts as aspect particles, adverbs of degree, and location.

## Chinese II Part 1

## World Languages: Chinese

Course Code: LI.WLC.300210.1.OT
Has Textbook: Yes
Course Length: 1 Semester
Chinese II Part 1 is a second-level course to Modern Standard Chinese - Mandarin as the spoken language and simplified characters as the written language. Students will review Chinese I materials and continue learning Chinese vocabulary in Pinyin and Chinese characters. This course introduces an intermediate-level vocabulary and Chinese characters using scenario-based examples. Students will continue learning about Chinese tradition and society through social tips to become more familiar with Chinese language and culture.

## Chinese II Part 2

## World Languages: Chinese

Course Code: LI.WLC.300210.2.OT

Has Textbook: Yes
Course Length: 1 Semester
In Chinese II Part 2, students will continue to expand their vocabulary, utilizing it in both dialogue and writing assignments. Lessons and topics are introduced in the same style as in Chinese II Part 1. Most lessons in this course continue to introduce simple English-like Chinese grammar. Topics covered in Part 2 give unique insight into one of the fastest growing, largest economies in the world and give students conversational ability, listening comprehension, and a large volume of vocabulary.

## French I Part 1

## World Languages: French

Course Code: LI.WLF.300109.1.HO
Has Textbook: Yes
French I Part 1 is an introductory course designed for learners who have little or no previous knowledge of the French language and French culture. As they progress through the course, learners will begin to acquire tools necessary for communication in the target language. They will interact with others as well as have the opportunity to present their ideas and interpret texts in French, using recordings, literature, and numerous other resources. Learners will gain a better understanding of other cultures by exploring the global Francophone community, and they will compare these different cultures to each other and to their own. This course will prime students' fluency in various communications with reasonable accuracy, such as the ability to greet others and exchange basic information about themselves, school, family, and preferences. They will also be able to describe people, things, and places, as well as to talk about and to write about daily activities using the present tense. This course, or its equivalent, is a prerequisite to French I Part 2.

HIGH SCHOOL

## French I Part 2

## World Languages: French

## Course Code: LI.WLF.300109.2.HO

Has Textbook: Yes
Course Length: 1 Semester
In French I Part 2, learners will build on their knowledge of the French language and Francophone cultures in order to effectively and meaningfully communicate in the target language. In addition to using the present tense to describe one's preferences and daily activities, learners will be able to use the passé composé and imparfait to present and exchange information regarding topics such as travel and occupation.

## French II Part 1

## World Languages: French

Course Code: LI.WLF.300210.1.HO
Has Textbook: Yes
In French II Part 1, students will have the opportunity to review some of the structures from French I, but they will also build their knowledge of the French language and culture. Some of the structures that learners will review include the present tense of regular and irregular verbs, the passé composé with avoir and être, and adjective agreement and placement. In French II Part 1, students will add to their knowledge foundation by employing direct and indirect object pronouns, reflexive verbs in the present tense, passé composé, and imperative mood. They will also learn vocabulary to talk about daily routines, celebrations, past events, and school. Additionally, students will explore the French cities of Paris and Rennes as well as the city of Quebec in Canada. They will also discover meals, sports, and crafts unique to the Francophone world.

## French II Part 2

## World Languages: French

Course Code: LI.WLF.300210.2.HO
Has Textbook: Yes
As in French II Part 1, each unit contains both cultural and grammatical learning points. In addition to using new vocabulary to discuss life in the country, outdoor activities, health, vacation, and books and films, students will be introduced to the imparfait and compare it to the passé composé. They will employ the future tense to talk about what will happen, and they will use the conditional and subjunctive moods to express hypothetical situations, necessity, and emotions. Students will be able to compare nouns using the comparative and the superlative. They will also explore the different cultural and culinary attractions of the Senegalese city of Dakar and the southern French city of Nice.

## French III Part 1

World Languages: French

Course Code: LI.WLF.300310.1.HO
Has Textbook: Yes
In French III Part 1, students will continue to explore the Francophone world, making stops in France, French-speaking Africa, and Francophone regions in the Americas. They will use new vocabulary to talk about school, communication, professions, and to discuss fairy tales and fables. Students will review the present tense, the past tenses (passé composé and imparfait), reflexive verbs, and the subjunctive mood as well as use the future perfect, the simple past, and the past conditional. They will be exposed to a variety of literary texts that utilize the structures and vocabulary that they will be learning. Students will also have opportunities to apply these structures to various written and recorded projects throughout the course.

## French III Part 2

World Languages: French

Course Code: LI.WLF.300310.2.HO
Has Textbook: Yes
French III Part 2 is a continuation of French III Part 1, focusing on French-speaking Europe and French departments and territories located around the globe. Students will use new vocabulary to discuss outdoor activities, media, environment, travel, government, and the arts. They will apply the subjunctive mood in a variety of new contexts, as well as use the past subjunctive and the passive voice. They will also review structures studied in previous courses, such as the future tense, the present participle, and the past perfect. As in Part 1, students will have the opportunity to study the vocabulary, grammar, and culture in context through authentic literary and journalistic texts, as well as to put these items into practice through written and spoken tasks.

## Advanced French Part 1

World Languages: French

Course Code: LI.WLF.400412.1.NP
Has Textbook: No
Advanced French Part 1 is designed for the student who already possesses comprehensive knowledge of the French language, as the course's instruction is entirely in French. In Advanced French Part 1, students will explore issues within a Francophone framework including the use of information and communication technologies, the political dimension of language, the diversity of French-speaking cultures, global issues, and science and medicine, among others. Students will engage in the topics of the course through authentic written and audiovisual texts and will be expected to reflect on, analyze, and discuss the topics through written and speaking activities. Reviews of grammatical concepts, as well as vocabulary enrichment, are built into each lesson as they pertain to the units' topics and the tasks students are expected to accomplish.

# Advanced French Part 2 

## World Languages: French

Course Code: LI.WLF.400412.2.NP
Has Textbook: No
Course Length: 1 Semester
Advanced French Part 2 is a continuation of Advanced French Part 1. As in Advanced French
Part 1, the instruction of Part 2 is entirely in French. Students will consider the notions of identity, family, community, and contemporary life in a Francophone context through literary and cinematic texts, newspaper and magazine readings, and audiovisual resources. Students will reflect and elaborate on these concepts as well as make comparisons to their cultures of origin through written and oral activities. Review of grammatical concepts and introduction of new vocabulary will prime the student for successful completion of communicative tasks.

## German I Part 1

World Languages: German

Course Code: LI.WLG.300110.1.HO
Has Textbook: Yes
In German I Part 1, the student is given a comprehensive introduction to the basic and fundamental skills necessary for expressing common ideas in the German language. The course will begin by introducing the student to the basics of introductory conversation and will build in theme and scope to address topics including daily activities, travel, needs, desires, and preferences in increasingly complex and typical situations. This provides a realistic context for the skills acquired by the student. The course also provides a considerably thorough study of grammatical skills, ranging from the most basic sentences to engaging and creative structures dealing with more interesting situations. There is a significant amount of vocabulary introduced across all four units, which provide a rich lexicon for communicating a large number of ideas. Throughout the course, a great deal of attention is paid to all of the skills necessary for a full and practical mastery of the language, such as reading, writing, listening, and speaking. Along the way, the student will acquire a familiarity with many of the cultural factors that helped to shape and are shaped by the German language. By the end of the first part of the course, the student will become a comfortable communicator in the basic aspects of the German language and will be prepared to continue further study in more intermediate and advanced themes in the second part of the course.

## German I Part 2

## World Languages: German

Course Code: LI.WLG.300110.2.HO
Has Textbook: Yes
This course continues at the same rigorous pace as German I Part 1, but with a more in-depth approach to the fundamental aspects of the language. Students will focus their study on the verb and gain a better understanding of its principal parts, versatility, and variety of tenses across the language. The student will be able to fluidly use verbs across many tenses discerningly upon completion of this course. The case system will also be extensively examined and implemented in an increasingly natural manner with nouns, verbs, and objects. A new case will be introduced to allow for more versatility when talking about possession, time, and dependence. Adjectives will be closely studied as well, with special attention paid to declension across all four cases in a variety of situations. Finally, more natural and practical vocabulary will be studied in this part of the course. Despite its advanced level, this will allow the student to communicate a substantial range of topics, not only in contemporary Germany but also in Europe and in the rest of an interconnected world.

## German II Part 1

## World Languages: German

Course Code: LI.WLG.300210.1.HO
Has Textbook: Yes
In German II Part 1, the student will receive a comprehensive introduction to nouns and verbs, and previously learned concepts will be reviewed. The case system will also be extensively examined. A study of the verb will be the main focus in this part of the course. Lessons will concentrate on different types of verbs and their conjugations in different grammatical tenses such as present, future, past simple, and present perfect. One of the most challenging aspects of German grammar - verbs with accusative, dative, and genitive prepositions - will be practiced thoroughly. A large amount of new vocabulary and idioms dealing with sports, health, travel, jobs, and the workday will be acquired and practiced through a close study of situational dialogues in every lesson. The student will become familiar with many cultural and social aspects of German life. Part 1 stresses speaking, comprehending, listening, reading, and writing skills. Many presentations, interactive exercises, and games will help students expand their knowledge.

## German II Part 2

## World Languages: German

Course Code: LI.WLG.300210.2.HO
Has Textbook: Yes
German II Part 2 provides a comprehensive review of German grammar, including adjectives, pronouns, prepositions, and conjunctions. Adjectives will be discussed with special focus on their use. All types of pronouns will be extensively examined, with special attention paid to problematic areas. This course will further elaborate upon the use of prepositions and conjunctions. Finally, the course will provide a deep understanding of subordinating clauses, one of the most challenging concepts in German grammar. A large amount of new vocabulary and idioms dealing with traveling, feelings, and German tradition will be acquired and practiced through a close study of situational dialogues in every lesson. Part 2 focuses on developing a better understanding of the German language and strengthening students' speaking skills. Written skills are developed as students are required to write various dialogues, descriptions, and paragraphs. Many presentations, interactive exercises, and games will help students expand their knowledge.

## Latin I Part 1

## World Languages: Latin

Course Code: LI.WLL.300709.1.PE
Has Textbook: Yes
Latin I Part 1 will introduce students to Latin through stories about the adventures of a typical Roman family. Students will read along while listening to the stories, which will help them practice correct pronunciation. They will discover grammatical patterns by reading the stories and will practice applying these patterns in guided exercises. Excerpts about Roman life and the Roman world, as well as popular Roman myths, will give students a glimpse of the historical and cultural background of Rome and how it relates to our world today.

## Latin I Part 2

## World Languages: Latin

Course Code: LI.WLL.300709.2.PE
Has Textbook: Yes
In Latin I Part 2, students will continue to read about the adventures of Cornelius and his family. Students will become familiar with more dative and ablative noun uses, as well as noun-adjective agreement. They will thoroughly review regular verbs, and they will learn future, perfect, pluperfect, and future perfect verb tenses and the forms of irregular verbs. Students will correctly use and translate various types of pronouns, and they will recognize fourth and fifth declension nouns.

## Latin II Part 1

## World Languages: Latin

## Course Code: LI.WLL.300210.1.PE

Has Textbook: Yes
In Latin II Part 1, students will read about Cornelius and his family and their adventures in Ancient Rome. Students will learn about clauses, passive verbs, present passive infinitives, and perfect passive participles. Adverbs and deponent verbs will be covered, as well as numbers, participles, and perfect active infinitive verbs. Students will continue to learn about Roman history throughout the chapters.

## Latin II Part 2

## World Languages: Latin

## Course Code: LI.WLL.300210.2.PE

Has Textbook: Yes
Course Length: 1 Semester
In Latin II Part 2, students will continue learning more advanced aspects of Latin grammar.
Students will be introduced to more adverbs, along with the irregular verbs "nolo," "malo," and "volo." The structure of questions will be discussed, as will the more complex uses of the dative case. Students will continue to master previously learned material while building their Latin vocabularies and dissecting complex Latin sentences.

## Spanish I Part 1

## World Languages: Spanish

Course Code: LI.WLS.300110.1.PE
Has Textbook: Yes
Spanish I Part 1 will provide the student with a strong foundation of the Spanish language and its cultural influences. Unit lessons incorporate pronunciation, basic grammar, and practical vocabulary components to give the student a fundamental understanding of written and conversational Spanish. Lesson topics include Spanish pronunciation sounds, greetings and introductions, questions, and present tense verb conjugation. Students will also learn how to describe people, school, and pastime activities in addition to likes and dislikes. Lessons are presented in a fun, interesting format that promotes learning and draws a link between the classroom and real-world situations.

## Spanish I Part 2

## World Languages: Spanish

## Course Code: LI.WLS.300110.2.PE

Has Textbook: Yes
Course Length: 1 Semester
Spanish I Part 2 will continue to provide the student with a strong foundation in the Spanish language and a sound study of Spanish cultural influences. In this course, students will learn to describe their families and express needs and desires when shopping or eating in a restaurant. Students will also learn irregular, present tense verb forms and common preterite tense verb forms. Lessons are presented in a fun, interesting format that promotes learning and draws a link between the classroom and real-world situations.

## Spanish II Part 1

## World Languages: Spanish

## Course Code: LI.WLS.300210.1.PE

Has Textbook: Yes
Course Length: 1 Semester
Spanish II Part 1 will introduce complex grammatical components, such as reflexive verbs and the present progressive, preterite, and imperfect tenses, along with idiomatic expressions unique to the Spanish language. Lessons will provide themed sets of nouns, verbs, and adjectives that will be used to compose refined dialogue relating to everyday scenarios. Building on an evergrowing lexicon, the student will incorporate concepts to form questions, express preferences and possession, discuss the past, and describe and compare people, places, and locations.

## Spanish II Part 2

## World Languages: Spanish

## Course Code: LI.WLS.300210.2.PE

Has Textbook: Yes
This course will continue to introduce complex grammatical components such as the preterite, imperfect, present perfect, and past perfect tenses; imperative and subjunctive forms; and idiomatic expressions unique to the Spanish language. Lessons will continue to provide themed sets of nouns, verbs, and adjectives that will be used to compose refined dialogue relating to travel as well as everyday scenarios. Building on an ever-growing lexicon, the student will incorporate concepts to tell stories; describe people, places, and locations; form commands and give suggestions; ask questions and give directions; and express preferences, intentions, and opinions.

## Spanish III Part 1

## World Languages: Spanish

Course Code: LI.WLS.301109.1.PE
Has Textbook: Yes
Spanish III Part 1 will allow students to review and apply grammar and vocabulary they have learned in Spanish I and Spanish II. Students will acquire a more extensive topical vocabulary. They will also gain a higher understanding of complex grammatical structures, verb applications, and idiomatic expressions to increase reading and listening comprehension, as well as fluency in speaking and writing. Students will describe, analyze, summarize, and explain ideas verbally and in writing in the target language.

## Spanish III Part 2

## World Languages: Spanish

Course Code: LI.WLS.301109.2.PE
Has Textbook: Yes
Course Length: 1 Semester
Students will acquire more extensive topical vocabulary in this course. They will also gain a higher understanding of complex grammatical structures, verb applications, and idiomatic expressions to increase reading and listening comprehension as well as fluency in speaking and writing. Students will read excerpts from narratives, informational essays, Internet sites, and newspaper articles. They will then answer questions, use the dictionary, and analyze and summarize their readings. Students will practice and develop their reading comprehension and writing skills. Students will describe, analyze, summarize, and explain ideas verbally and in writing in the target language.

## AP/Advanced Spanish Part 1

## World Languages: Spanish

## Course Code: LI.WLS.401209.1.PE

Has Textbook: Yes

## Course Length: 1 Semester

AP/Advanced Spanish is an accelerated course meant to prepare students who plan to take the Advanced Placement exam. This course meets the Advanced Placement criteria required by the College Board. To earn the AP designation, students must successfully complete both Part 1 and Part 2 of this course in addition to the required weekly office hours. AP/Advanced Spanish Part 1 will develop students' listening, reading, speaking, and writing skills, as well as their understanding of Hispanic culture. Students will read and analyze authentic texts, including narratives, novel excerpts, modern articles, Internet resources, and documents concerning current events. Students will also listen to and respond to authentic recordings. Students will practice and apply advanced grammar and syntax, as well as precise vocabulary, to express themselves more accurately in a variety of contexts. The students will participate in weekly, real-time online "charlas," or chats, in which they will engage in contemporaneous conversations and discussions with each other and the teacher. These meetings will focus on spontaneous language tasks based on a variety of situations and themes.
Students will initiate and close conversations, negotiate meaning, ask and respond to questions, give and receive directions, and present and support opinions. Students' conversational abilities will be critiqued by the instructor based on their ability to meet the standard of high-level proficiency. Feedback will be provided. This course includes auditory comprehension assessments that require students to listen to audio files and record themselves speaking. For both parts of this course, it is essential that students have either a headset equipped with a microphone or access to an internal microphone within their computers.

## AP/Advanced Spanish Part 2

## World Languages: Spanish

Course Code: LI.WLS.401209.2.PE<br>Has Textbook: Yes<br>\section*{Course Length: 1 Semester}

AP/Advanced Spanish is an accelerated course meant to prepare students who plan to take the Advanced Placement exam. This course meets the Advanced Placement criteria required by the College Board. To earn the AP designation, students must successfully complete both Part 1 and Part 2 of this course in addition to the required weekly office hours. Students will continue to read and analyze authentic texts such as poems, narratives, play excerpts, modern articles, Internet resources, and documents concerning current events. Students will listen to and respond to authentic recordings. They will also interact with various resources to continue to build their knowledge of Hispanic culture. Students will practice and apply advanced grammar, syntax, and precise vocabulary to express themselves more accurately in a variety of contexts. Students will participate in weekly, real-time online "charlas," or chats, in which they will engage in contemporaneous conversations and discussions with each other and the teacher. These meetings will focus on spontaneous language tasks based on a variety of situations and themes. Students will initiate and close conversations, negotiate meaning, ask and respond to questions, give and receive directions, and present and support opinions. Students' conversational abilities will be critiqued by the instructor based on their ability to meet the standard of highlevel proficiency. Feedback will be provided. This course includes auditory comprehension assessments that require students to listen to audio files and record themselves speaking. This course includes auditory comprehension assessments that require students to listen to audio files and record themselves speaking. For both parts of this course, it is essential that students have either a headset equipped with a microphone or access to an internal microphone within their computers.

## Introduction to Business

## Electives: Business

Course Code: LI.BUS.300307.0.MH
Has Textbook: Yes
Course Length: 1 Semester
Introduction to Business will guide students through examples of their roles as wage earners, consumers, and citizens as they explore the wide, exciting world of business. Course topics range from the extensive use of credit to the role of government in the U.S. economy. Students will be introduced to insurance, investments, communication, transportation, labor, world trade, and other issues vital to succeeding in today's economy. Tips on career planning and job seeking promise to be especially helpful.

## Marketing/Advertising

## Electives: Business

Course Code: LI.BUS.300407.0.MH
Has Textbook: Yes
Throughout this course, students will discover the various ways marketing and advertising touch their lives. Students will learn to identify customers' desires and discover what is needed to create, advertise, and sell products to fit these needs. The course guides students to develop the skills they need as consumers and advertisers. Also, it will provide a solid foundation for those students contemplating careers in marketing, advertising, or other business-related fields.

## Money Management

## Electives: Business

Course Code: LI.BUS.301008.0.QU
Has Textbook: Yes
Course Length: 1 Semester
Money Management will offer guidance in responsible money organization skills. Topics covered in this course include various methods and approaches to saving and investing money for retirement, developing a sound budget, and eliminating debt. Students will also learn about several types of insurance, career planning, and the "ins and outs" of real estate and mortgages. This course is designed to provide a solid foundation for a lifetime of wise financial decision making.

## Pennsylvania Driver Education

## Electives: Driver Education

Course Code: LI.ELE.300107.0.PE
Has Textbook: Yes
This Pennsylvania Driver Education course helps Pennsylvania students develop a positive, mature, and knowledgeable approach toward driving. The course does not offer behind-thewheel instruction; however, it provides many outstanding tips on driving strategies and Pennsylvania traffic laws. Students will develop the thinking skills crucial to the development of safe driving practices. This course also qualifies for the 30 hours of classroom participation required by the Pennsylvania Department of Motor Vehicles before a learner's permit can be issued. Upon successful completion of this course, students can request a certificate of completion from their instructor that will qualify them for discounted automobile insurance rates.

## Driver Education

## Electives: Driver Education

Course Code: LI.ELE.300609.0.PE
Has Textbook: Yes
Course Length: 9 Weeks
This driver's education course is designed to address safety issues and help students develop a positive, mature, and knowledgeable approach toward driving. The course does not offer behind-the-wheel instruction; however, it does provide many outstanding tips on driving strategies and traffic laws. Students will develop the thinking skills crucial to the development of safe driving practices. This course also qualifies for the 30 hours of classroom participation commonly required by each state's Department of Motor Vehicles before a learner's permit can be issued.

## Arts Alive Part 1

## Electives: Fine Arts

Course Code: LI.ART.301007.1.NN
Has Textbook: Yes
Arts Alive Part 1 will expose students to various art forms, such as visual arts, music, and literary arts. The course's lessons and activities will increase students' awareness and appreciation of art. A majority of the activities involve reading and writing responses to summarize or present students' thoughts about particular artists or forms of art. Examples of some of the projects or activities include: compare and contrast essays about artists and their artwork, designing an illuminated letter, creating a poem, and playing interactive games on art websites.

## Arts Alive Part 2

## Electives: Fine Arts

Course Code: LI.ART.301007.2.NN
Has Textbook: Yes
Arts Alive Part 2 will expose students to various art forms, including dance, theatre, media arts such as filmmaking, and the different media and processes of making art. The course's lessons and activities will continue to increase students' awareness and appreciation of art. Examples of some of the writing activities include: planning a thematic dance performance, preparing to capture an important event on video, and explaining the stages of creating pottery.

## Art History Part 2

## Electives: Fine Arts

Course Code: LI.ART.300107.2.MH
Has Textbook: Yes
Course Length: 1 Semester
Art History Part 2 continues the introductory principles of Art History Part 1. It focuses on the art and architecture of Europe and North America. The course continues to follow a chronological timeline showing how art and world events have influenced each other from early medieval times to the modern era. Particular emphasis centers on viewing works of art within their historical and cultural context so that students learn to understand how these key achievements relate to the past and present world.

## Art History Part 1

## Electives: Fine Arts

Course Code: LI.ART.300107.1.MH
Has Textbook: Yes
Course Length: 1 Semester
Art History Part 1 is an introductory art course that focuses on the art and architecture of the ancient Near East and Europe. The course begins with a brief overview of the fundamental methods of art; the meaning, purposes, and styles of art; the art elements and principles of design; and the various media used to create artwork. Then it follows a chronological timeline. The timeline shows how art and world events have influenced each other from the prehistoric period to the early medieval era.

## Drawing

## Electives: Fine Arts

Course Code: LI.ART.301307.0.MH
Has Textbook: Yes
This course spotlights drawing as a form of communication and introduces students to the elements and principles of art through hands-on activities. Students will sharpen their observation skills using a variety of art media, including graphite, charcoal, pastel, and collage materials. Through practice and experimentation, students will become adept at using basic drawing techniques and processes to depict the world around them, as well as to express their thoughts and feelings. In order to provide a comprehensive study of drawing, this course will analyze and interpret drawings created by others, introduce the concepts of aesthetics and art criticism, and explore the practical application of drawing in a variety of careers. Virtual field trips to art museums and artists' studios, as well as methods to build, organize, and maintain an artist's portfolio, are included in this course.

## Fashion and Design

## Electives: Fine Arts

Course Code: LI.ART.301507.0.PE
Has Textbook: Yes
Fashion \& Design is an advanced level course for students interested in learning the intricate process of how the fashion system works. This is an in-depth study of the fashion business in sequential order from concept to consumer. The fashion business involves a series of buying supplies, creating and developing a new product, and marketing the product. The fashion industry includes all the processes involved with producing raw materials, apparel, and accessories. Also, it encompasses the retail stores that sell fashion merchandise to the public. It is important for executives in the fashion trade to know how all of these processes interrelate. Students will learn that the decision making process is complex and not just about the latest designers, styles, or trends of an era. Particular emphasis will be on the planning, manufacturing, and marketing processes throughout history.

## Graphic Design

## Electives: Fine Arts

Course Code: LI.ART.302011.0.NP
Has Textbook: No
Course Length: 1 Semester
Graphic Design will provide students with a foundation in design basics and will introduce students to the field of graphic design. Students will explore the history of graphic design, learn about famous graphic designers, see how the tools and technology used by designers have evolved, and discover how designers use the elements and principles of art and design to create successful pieces. The course introduces typography and demonstrates how to creatively use type. The course also shows how to work with different types of layouts, work with a grid system, and work with advanced design concepts, such as minimalism. Students will explore the design process, which includes creativity, planning, visualizing, and constructing images through many different projects in which students create logos, business cards, letterheads, envelopes, mailers, flyers, posters, brochures, magazine layouts, and package designs. The course also covers concepts such as branding and advertising, while delving into the printing process so that students can see how design projects are completed from start to finish. Finally, students will explore non-print design work, such as Web design and multimedia. Students will also look at various jobs in graphic design and explore the steps they can take, such as internships, networking, and creating a portfolio and resume, to gain a successful career as a graphic designer.

## Cinematic Review

## Electives: Fine Arts

Cinematic Review will introduce students to the filmmaking process. The course will explore the technology that makes a film, analyze the filmmaking process from beginning to end, and begin to build an aesthetic appreciation of films. Various mainstream and art films will be discussed for their art, technology, and marketing success, or lack thereof. Students will develop a better appreciation of the movie-making process, learn how marketing can make or break a film, and discuss the ever-changing technology that can make everyone a filmmaker.

## Theatre Part 1

## Electives: Fine Arts

Course Code: LI.ART.300507.1.MH
Has Textbook: Yes
Theatre Part 1 will familiarize the student with the historical background of theatre, as well as the basic elements of acting. Learners will also study stage lighting, sound, costume, and makeup. Students will learn to apply voice and gesture skills in pantomimed and improvised scenarios. The responsibilities of the producer and director of a theatre production will be discussed, in addition to the duties of the equipment and technical crews. Learners will create specific characters through the use of gesture, voice, motivation, and background, and will learn proper stage movements.

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## Theatre Part 2

## Electives: Fine Arts

Course Code: LI.ART.300507.2.MH
Has Textbook: Yes
Theatre Part 2 provides a balanced educational experience for all students. The diversity of this course provides opportunities for the involvement of all students, regardless of experience and abilities. Theatre promotes unity, inquiry, and critical and constructive thought, as well as skills of comparison, problem-solving, interpretation, judgment, and research. Students are encouraged to investigate old and new ideas by exploring, discovering, creating, and clarifying their perceptions and knowledge. This course covers the art of character analysis and a variety of acting techniques, as well as the technical elements of theatre, such as sets, costumes, makeup, and special effects.

## The Study of Contemporary Music Trends Part 1

## Electives: Fine Arts

Course Code: LI.ART.300707.1.OT
Has Textbook: Yes
Course Length: 1 Semester
The Study of Contemporary Music Trends will introduce and explore the roots of contemporary American music. This course will focus on the social, technological, and artistic trends that helped create and shape music of the 1920s through the 1970s. Learners will explore various genres and periods of music, including the early development of rock and roll in the 1950s, the evolution of popular music, the British Invasion of the 1960s, and the many "mutations" of rock music in the 1970s.

## The Study of Contemporary Music Trends Part 2

## Electives: Fine Arts

Course Code: LI.ART.300707.2.OT
Has Textbook: Yes
Course Length: 1 Semester
The Study of Contemporary Music Trends Part 2 will continue to explore the roots of contemporary American music. After completing this course, students will have gained a deeper understanding and appreciation for various forms of contemporary music, ranging from rock to jazz to country. This course will focus on the social, technological, and artistic trends that helped create and shape music of the 1980s through present times. Students will explore the history of each form and the role of music in the modern world.

## The History and Development of Jazz

## Electives: Fine Arts

Course Code: LI.ART.301407.0.PE
Has Textbook: Yes
Course Length: 1 Semester
Jazz is a unique American art form considered by many to be among our nation's most important cultural contributions to the world. This course examines the development of jazz, from the sounds of Dixieland, through bebop and modern jazz, to today's popular fusions of traditional jazz with rock, hip-hop, and other emerging styles. Students will develop a full understanding of the trends, artists, and artistry that influenced the evolution of jazz, and gain a deeper appreciation of jazz's unique and prominent position in the history of music.

## Introduction to Music Theory

## Electives: Fine Arts

Course Code: LI.ART.301608.0.QU
Has Textbook: Yes
Introduction to Music Theory is recommended for students who plan to pursue music at a postsecondary level. Students will explore in-depth elements of music, from the essential building blocks to advanced analytical devices, which will help students sharpen their musical skills. This course will lead to a thorough understanding of music composition and theory. Concepts covered include melodic, rhythmic, and harmonic materials; musical structure and form; and composition and analysis. Students will develop a fundamental understanding of music notation and structures in music. Additional topics covered include techniques of music notation, musical acoustics and instrumentation, rhythm and meter, pitch collections and modes, intervals and tuning theory, melodic structure and types of musical texture, an introduction to counterpoint, and the structure and identification of chords.

## Health

## Electives: Health

Health education is no longer viewed as a supplemental course as it was years ago. Today's teenager is frequently faced with life choices that can be best dealt with through education and a healthy lifestyle. Students will find this health course to be both enjoyable and useful because it encompasses important topics about daily life. Each unit will cover issues that will promote a safe, healthy, and active lifestyle. Subjects will range from nutrition and safety to sexuality and the ill effects of drugs on the body.

## Personal Fitness

## Electives: Health

Students will learn to understand their lifestyles in this personal fitness class. This course teaches students practical ways to control their health through nutrition, exercise, and stress management. Students will discover that physical fitness means feeling good and looking good. This course will explore a variety of topics, such as stress, weight control, and nutrition. A cumulative project will allow students to design their own personal fitness programs.

## Road to Wellness Part 1

## Electives: Health

Course Code: LI.HEA.300707.1.NN
Has Textbook: Yes
Increased public awareness concerning the importance of maintaining good health makes the Road to Wellness class a timely subject. Students in this class will discover there is no time like the present to learn about wellness. This course encompasses a variety of topics that focus on nutrition and physical fitness. Subjects covered include basic nutrition principles, the digestive system, practicing nutrition, the new dietary guidelines, label reading, and food safety. Other areas included are the foundation of physical fitness, exercise guidelines, and sports nutrition. This is an exciting and self-motivating course that will inspire students to travel on the road to wellness.

## Road to Wellness Part 2

## Electives: Health

In Road to Wellness Part 2, students will continue to study a variety of topics with factors related to nutrition and physical fitness. Students will delve further into basic nutrition principles, the digestive system, practicing nutrition, the new dietary guidelines, label reading, and food safety. Topics such as the foundation of physical fitness, exercise guidelines, and sports nutrition are discussed in more detail. The conclusion of this course will continue to motivate students to make healthy lifestyle choices.

## Introduction to Web Design

## Electives: Multimedia

## Course Code: LI.TEC.300509.0.NP

Has Textbook: No
Introduction to Web Design combines learning from the fields of art, technology, and business to introduce students to an exciting and growing profession. The emphasis of this course is on design, not programming, although basic HTML is explored. Students will be introduced to leading-edge tools like Adobe Photoshop and Adobe Flash to understand how to design Web pages, as well as learn practical techniques for working both as a member of a Web design team and independently, all the while focusing on client interaction.

## Intermediate Web Design

## Electives: Multimedia

Intermediate Web Design is constructed to engage students in intermediate-level, Web-based design and development concepts. It will incorporate HTML, CSS, JavaScript, and information design, as well as instruction on image optimization and editing with Adobe Photoshop Elements. This course will also cover server/client architecture, proposal creation for projects involving "real world" clients and scenarios, and the full scope of the production process. In addition, students will learn how to create a fully functional website upon the completion of this course.

## Photoshop Elements: 7

## Electives: Multimedia

Course Code: LI.TEC.300609.0.PE
Has Textbook: Yes
Adobe Photoshop is the industry standard for design programming for photographers, graphic designers, engineers, scientists, and film professionals. Nearly all professional advertising agencies, television studios, and Web design studios use Photoshop for print ads, Web ads, set design, props, and storyboard creation. While the industry applications are varied, any user will need a solid knowledge base as a start. This course uses Adobe Photoshop Elements Version 7 to introduce students to the basic functions and tools of Photoshop. This course will challenge students' creativity through project-based assignments. Course topics will include basic organizational skills related to work folders and keyword tags; photo enhancement, editing, and adjustments; printing, sharing and exporting picture files; adjusting lighting and colorization within images; and working with text, borders, and layering to create a stylized final product. Students will work on realistic assignments and create work projects appropriate for a developing portfolio.

## Interactive Game Design Part 1

## Electives: Multimedia

Course Code: LI.TEC.302007.1.PE

Has Textbook: Yes
Course Length: 1 Semester
Interactive Game Design 1 is an introductory course for any student interested in learning about the creative design process behind electronic games. Students will learn how to create their own game ideas and how to develop those ideas into the full-fledged game design documents that game designers use in the real world.

## Interactive Game Design Part 2

## Electives: Multimedia

Course Code: LI.TEC.302007.2.PE
Has Textbook: Yes
Course Length: 1 Semester
Interactive Game Design Part 2 will continue to teach students how to design original and creative console and computer games. In this part of the course, students will learn how to properly design user interfaces, effectively use artificial intelligence, create deep characters and compelling stories, properly balance a game for fair play, and effectively market a game. Students will create a revised version of the game design document that they made in Part 1 of this course to incorporate all of the new things they learn in Part 2. This course will also offer students advice about getting jobs in the game industry, including résumé and portfolio tips, how to get noticed, and where to find contacts within the industry.

## Career Explorations

## Electives: Personal Development

Course Code: LI.ELE.301112.0.CE

Has Textbook: Yes
Learners enrolled in the Career Explorations course will investigate careers that match their strengths, interests, abilities, and values. Students will learn how to prepare for specific jobs and discover what additional training or preparation is needed for a future career path. They will acquire job-seeking skills such as resume-writing, interviewing, time management, and portfolio development. Learners in this course will develop effective communication skills and will generate an action plan for successful school to work transition. This course is designed to give students the tools they need to develop better workplace skills, handle career issues, money management, and balancing work and personal life.

## Family and Consumer Sciences

## Electives: Personal Development

Course Code: LI.ELE.300811.0.NP
Has Textbook: No
Family and Consumer Sciences is designed to provide students with the basic information and skills needed to function effectively within the family and within a changing, complex society. Emphasis is given to the development of competencies related to family, career, and community leadership in America. This course will also include discussions pertaining to family and individual health, relationships, arrangement of personal living space, wardrobe planning and selection, and garment care and construction. Students will learn about child care while focusing on how to select toys and age-appropriate play activities for children; health and safety procedures; nutrition and food selection; and meal planning, preparation, and service. The section on home management will discuss money management; the use of credit and banking services; consumer education; computer use at home, in school, and in the workplace; and career skills. Upon completion of this course, students will have developed basic life skills that promote a positive influence on the quality of life.

## Life Skills Part 1

## Electives: Personal Development

Course Code: LI.ELE.301312.1.PE

Has Textbook: Yes
Life Skills Part 1 is designed to provide students with information they will need as they begin the next phase of their life, adulthood. Students will learn to become more responsible for their own decisions as they move toward adulthood. Throughout the course, students will have the opportunity to begin making some plans for what they want to accomplish in their lives. This course will guide students in figuring out who they are, including their personality, abilities, and interests.

## Life Skills Part 2

## Electives: Personal Development

Course Code: LI.ELE.301312.2.PE

Has Textbook: Yes
Course Length: 1 Semester
Life Skills Part 2 walks students through computer technology, social awareness, career planning, the employment setting, and the educational setting. These skills will help make the transition from high school to the next step smoother, whether students plan to go on to a job or a postsecondary school. Students will also learn the importance of living independently and how to take care of themselves and a home.

## SAT Prep - Math

## Electives: SAT Preparation

Course Code: LI.ELE.300309.0.MH
Has Textbook: Yes
Students planning to pursue a college education will most likely have to take the SAT, and this two-unit course will help those students review various concepts covered throughout high school math. Because the SAT focuses on critical thinking and problem solving, this course will address the math concepts in ways that learners can expect to encounter on exam day. Additionally, the SAT Math Prep course includes information on test-taking strategies, confidence-boosting tips, and even includes practice tests that simulate test day. When the course is completed in full, students should be confident that they have prepared to the best of their ability for the math portion of the SAT.

## SAT Prep - Verbal

## Electives: SAT Preparation

Course Code: LI.ELE.300409.0.MH
Has Textbook: Yes
SAT Prep -Verbal is a two-unit course designed to enable students to be successful on the SAT Critical Reading and Writing exams. The focus of the course is to demonstrate to students various test-taking skills and strategies to enhance success on the verbal portion of the SAT exam. Learners will practice answering common types of questions included on the test. They will also be taught to utilize critical reading and writing skills, including reading comprehension, sentence completion, sentence and paragraph improvement, and grammatical error identification. Upon completion of this course, students will be prepared to write an SAT-style, timed essay supporting a point of view on a given issue.

## Basic Microsoft Office Skills 2003

## Electives: Technology

Basic Microsoft Office Skills will teach students the skills needed to operate Microsoft Word and Microsoft PowerPoint. Students will learn how to use screen elements, toolbars, help, and auto content wizards for both programs. Using Word, students will create and format business documents, such as letters and reports. A variety of editing tools, such as tabs, paragraph indentations, headers and footers, cut and paste, font styles, points, and colors will also be discussed. Saving and retrieving documents will be stressed, as well as using the spelling and grammar checks and inserting columns and tables. While learning PowerPoint, students will create slides and presentations using normal view, outline pane, and sorter view. The learner will explore formatting and proofing text and print options, inserting and manipulating objects, and creating custom animations, as well as timing and rehearsal for presentations.

## Basic Microsoft Office Skills 2007

## Electives: Technology

Course Code: LI.TEC.300408.0.QU
Has Textbook: Yes

## Course Length: 1 Semester

Basic Microsoft Office Skills will teach students the skills needed to operate Microsoft Word and Microsoft PowerPoint. Students will learn how to use screen elements, toolbars, help, and auto content wizards for both programs. Using Word, students will create and format business documents, such as letters and reports. A variety of editing tools, such as tabs, paragraph indentations, headers and footers, cut and paste, font styles, points, and colors will also be discussed. Saving and retrieving documents will be stressed, as well as using the spelling and grammar checks and inserting columns and tables. While learning PowerPoint, students will create slides and presentations using normal view, outline pane, and sorter view. The learner will explore formatting and proofing text and print options, inserting and manipulating objects, and creating custom animations, as well as timing and rehearsal for presentations.

## Introduction to Office Applications 2003

## Electives: Technology

Course Code: LI.TEC.300107.0.OT
Has Textbook: Yes
Course Length: 1 Semester
Introduction to Office Applications will help prepare students to use basic functions in word processing, spreadsheets, database creation and management, multimedia, and collaboration software. The text, Microsoft Office Systems Step by Step, will be used to guide students through hands-on learning of Microsoft programs, such as Word, Excel, Access, PowerPoint, and Outlook. The successful completion of this course will introduce students to the most common business applications being used today.

## Introduction to Office Applications 2007

## Electives: Technology

Course Code: LI.TEC.300108.0.QU
Has Textbook: Yes
Course Length: 1 Semester
Introduction to Office Applications will help prepare students to use basic functions in word processing, spreadsheets, database creation and management, multimedia, and collaboration software. The text, Microsoft Office Systems Step by Step, will be used to guide students through hands-on learning of Microsoft programs, such as Word, Excel, Access, PowerPoint, and Outlook. The successful completion of this course will introduce students to the most common business applications being used today.

## Computer-Aided Drawing \& Design

## Electives: Technology

Course Code: LI.TEC.300207.0.MH
Has Textbook: Yes
Course Length: 1 Semester
Computer-Aided Drawing \& Design will introduce students to the rationale for and basic concepts of technical drawing, including both technical drawing standards common in industry, and the use of CAD software to prepare technical drawings and drafts far more precise than any handdrawn documents. Students will develop an understanding of the role technical drawings play in the design-development process and understand why they are considered the "universal language of industry." They will learn specialized terminology, standardized methods for producing technical drawings, and the computer's role in expediting the production, editing, storage, and transfer of technical drawings. Students will also learn how CAD is an essential function for smoother, easier business and design communication worldwide. Students will utilize CAD basic drawing principles while progressing through the course and will compile technical drawings as the software takes the place of the pencil, paper, and drawing instruments.

## Introduction to Computer Programming Part 1

## Electives: Technology

Course Code: LI.TEC.300307.1.PE
Has Textbook: Yes
Course Length: 1 Semester
Introduction to Computer Programming Part 1 uses Alice, an innovative 3-D programming environment that makes it easy and fun to learn object-oriented computing. In Alice, objects are easily visible because they are identified as three-dimensional humans, animals, furniture, etc. The state of Alice objects is changed via method calls, such as "move forward one meter" or "turn left a quarter turn." These messages are easily understood by students. Computation is displayed by animations. One can hardly imagine a better way to express the notion of embodying state in an object and using computation to change that state. One of Alice's real strengths is that it has been able to make abstract concepts concrete in the eyes of first-time programmers.

## Introduction to Computer Programming Part 2

## Electives: Technology

Course Code: LI.TEC.300307.2.PE

Has Textbook: Yes
Course Length: 1 Semester
Introduction to Computer Programming Part 2 will continue to teach students object-oriented computing. Students will create an amusement park ride in addition to a chicken that tries to cross a busy road to eat gumdrops, and a flight simulation game. The final project will give students the opportunity to be creative and design an Alice program of their choice.

## CES: Biotechnology

## Cutting Edge Science: CES: Biology Series

Course Code: LI.CES.302108.0.QU
Has Textbook: Yes
Course Length: 9 Weeks
The Biotechnology Module is divided into two units. The first section provides a background on the basics of biotechnology and includes its historical context, laboratory equipment, and techniques, and safety criteria, and gives a comparison between research and production laboratories. The first section concludes with a review of basic chemistry and comparative cellular and molecular biology concepts. The second section presents more advanced topics and the current application of biotechnology. These topics include the structure and functions of proteins, genetic sequencing, polymerase chain reactions, genetic transformation, and the use of antibodies in biotechnology. The second unit culminates by introducing professionalism and a sample of the careers available in the field of biotechnology.

## CES: Epidemiology

## Cutting Edge Science: CES: Biology Series

Course Code: LI.CES.302208.0.QU
Has Textbook: Yes
Epidemiology is the study of health and disease within a population. In this two-unit course, students will look at different ways to collect and analyze data and explore how to best communicate results. Starting with the example of Dr. John Snow and the cholera outbreak in the 1800s, students will look at a number of case studies surrounding disease control and apply them to the population's current health status. There will also be a concentration on the different types of data used in epidemiology. The course will discuss the use of this data to determine the health of a population. The final step will be to determine the possible need for public policies and to establish a goal to improve the health status within a population.

## CES: Forensic Science

## Cutting Edge Science: CES: Biology Series

Course Code: LI.CES.302312.0.NP
Has Textbook: No
Forensic Science, a two-unit course, will introduce students to the fascinating worlds of crime scene investigation and laboratory science. Students will learn the fundamental procedures involved in investigating and processing forensic evidence. They will explore historic and theoretical crime scenes and apply the procedural methods required for examination, collection, and documentation of evidence. They will also explore the forensics lab to learn about testing methods, equipment, safety measures, and results interpretation. Additionally, students will explore the various fields and careers in forensic science.

## CES: Emerging Genetics

## Cutting Edge Science: CES: Biology Series

CES: Emerging Genetics is a two-unit course that provides students with the basic knowledge necessary to understand genetics and its applications. The introduction offers early discoveries in genetics, such as the contributions of Charles Darwin, Alfred Wallace, and Gregor Mendel. Students will conceptualize and apply Mendelian genetics and advance through the timeline of this field to study the great contributions of James Watson, Francis Crick, Rosalind Franklin, and Maurice Wilkins. With the structure of DNA covered in detail, students will apply this structure to its unique and complex function with the realm of the central dogma and mutations brought to light. The second portion of this course provides students with the basic skills needed to understand molecular genetics and its application to today's society. The introduction consists of learning about techniques such as cloning and hybridization. Gaining an understanding of these techniques will allow the learner to see how they are applied to such areas as GMOs, animal development, cancer studies, DNA fingerprinting, and pharmacogenomics. Throughout this portion, the importance of population genetics and the theory of nature versus nurture will also be stressed.

## CES: Sports Medicine

## Cutting Edge Science: CES: Biology Series

Course Code: LI.CES.302512.0.NP
Has Textbook: No

CES: Sports Medicine is a two-unit introductory course that will provide students with basic knowledge about the field of sports medicine, the anatomy of the body, and the common injuries that occur in sports. The first half of the course deals with the anatomy of the body and techniques used in sports medicine to train and strengthen the body. The second half helps students better understand how injuries occur and what treatment options are available.

## CES: Stem Cell Research

## Cutting Edge Science: CES: Biology Series

Stem Cell Research, a two-unit course, will introduce students to the fascinating world of stem cells. Students will learn all the basic terminology used in this field. The course will discuss the different types of stem cells, as well as the controversies surrounding the use of human embryonic stem cells. Additionally, the course will examine possibilities that may be in store for the treatment of disease using stem cell therapy. The first unit emphasizes the impact of modern research methods and resources on stem cell research and explores some challenges that still exist in the field. Students will learn the advantages, disadvantages, and limitations of stem cell research. This section concludes with an examination of the possible alternate sources of stem cells. The second unit examines the applications and the roles of stem cell research, particularly in the topics of leukemia, spinal cord injuries, Alzheimer's disease, cord blood, and drug testing. The course culminates with the investigation of the accuracy, validity, and reliability of scientific research and claims.

## CES: Introduction to Energy

## Cutting Edge Science: CES: Energy Series

Introduction to Energy will explore the basic concepts of energy science, current energy issues, energy distribution systems, fossil fuels and alternative energy production, and the complex political issues surrounding energy. The course will explore in detail several cutting-edge energy technologies including low emission transportation fuels and technologies. Using media tools such as simulations, videos, and digital labs, students will explore how energy usage affects our daily lives and the future of our planet. Videos feature interviews with energy technology researchers from Los Alamos National Laboratory. This CES course serves as the prerequisite to all other courses within the Energy Series.

# CES: Energy, Climate Change, and Biodiversity 

## Cutting Edge Science: CES: Energy Series

In CES: Energy, Climate Change, and Biodiversity, students will learn about the Earth's physical climate system, and natural and manmade climate forcings, including the Earth's orbit around the sun, human population growth, and energy consumption. Students will also explore paleoclimatology (the study of historic climate), predictive computer simulations, and how changes in the Earth's climate are affecting marine life, vegetation, and animal species at the polar ice caps and worldwide. Videos for this course were developed in collaboration with Los Alamos National Laboratory.

## CES: Biofuels: Algae, Fungi, and Other Surprises

## Cutting Edge Science: CES: Energy Series

In CES: Biofuels: Algae, Fungi, and Other Surprises, students will explore both fossil and alternative fuels to gain a core understanding of the chemical properties of fuels. Further, they will examine the research, applications, and economic and environmental impact of bioethanols and biofuels. With a focusing on biofuels, students will study the fungi-to-bioethanol conversion process and the microalgae-to-biocrude conversion process as well as the harvesting and practical utilization of these fuel resources. Videos for this course were developed in collaboration with Los Alamos National Laboratory.

## CES: New Solar Technologies

## Cutting Edge Science: CES: Energy Series

CES: New Solar Technologies is a two-unit course in which students will explore a variety of exciting scientific advances in solar technologies. Students will learn how the sun provides a plentiful energy resource that can be used in various technologies to meet growing global energy demand. Technologies that will be explored include passive solar building systems and active solar collection systems, such as photovoltaics, parabolic collectors, Fresnel collectors, and Stirling dishes. Students will also explore issues in energy storage and solar applications for vehicles and spacecraft. Through hands-on labs, students will research solar energy applications. Videos for this course were developed in collaboration with Los Alamos National Laboratory's solar researchers and Carnegie Mellon University's Intelligent Workplace/2007 Solar Decathlon House.

# CES: Transportation of the Future <br> Cutting Edge Science: CES: Energy Series 

Course Code: LI.CES.302909.0.NP
Has Textbook: No
Awareness about the environmental impact of transportation has initiated a revolution in 21stcentury vehicle design and technology. In this two-unit course, students will learn about the process of designing and building a vehicle and will examine vehicle engine systems in fossil fueloperated vehicles. Students will also learn about emerging alternative technologies and materials in vehicle transportation, including hydrogen fuel cells, electric vehicle motors, solar-powered vehicles, bullet trains, Progressive watercraft and aircraft, and spacecraft. Using videos and hands-on labs, students will explore the impact of practical materials and applications on transportation. Videos for this course were developed in collaboration with Los Alamos National Laboratory.

## CES: Introduction to Engineering

## Cutting Edge Science: CES: Engineering Series

Introduction to Engineering, a four-unit course, provides an overview of the field of engineering and the primary processes and procedures used by engineers. Engineers play a central role in developing products and systems that improve our everyday lives, in areas such as transportation, computing, and medicine. In this course, students will explore each step of the product development cycle, from modeling and prototyping through production. Students will discover the interdependencies between the fields of engineering, science, and technology, and will explore engineering careers that suit their personal interests and abilities. Finally, students will examine the ethical and societal effects of engineering, which play a key role in the development of all engineered products and systems. Content for this course was developed by engineering and technology education professors at California University of Pennsylvania. Videos for this course were developed in collaboration with Los Alamos National Laboratory.

## CES: Applied Engineering

## Cutting Edge Science: CES: Engineering Series

CES: Applied Engineering is a four-unit course in which students will explore core concepts and practical applications of various engineering fields. Unit 1 focuses on electrical engineering as it explores energy science, electrical and electronic components, devices and systems with digital labs to reinforce comprehension. Unit 2 focuses on mechanical engineering as it explores materials science and the physical dynamics of mechanical systems with case studies to support understanding. Unit 3 focuses on software and computer engineering as it explores computer languages and coding, networks, and hardware components and systems. Unit 4 focuses on aerospace engineering as it demonstrates multidisciplinary application of the other engineering fields. Content for this course was developed by engineering and technology education professors at California University of Pennsylvania. This is a rigorous four-unit course geared to prepare 11th-12th grade students for further engineering study.

## CES: Engineering Land Speed Vehicles

## Cutting Edge Science: CES: Engineering Series

Course Code: LI.CES.300210.0.NP

Has Textbook: No
Course Length: 9 Weeks
Being a racecar driver sounds exciting, but there is a tremendous amount of effort and knowledge required to plan, build, and test these special vehicles. In this two-unit course, students will learn about essential functional systems of speed vehicles. Students will also discover the different types and classes of racecars as well as many of the specific vehicles and teams currently racing on the Bonneville Salt Flats in Utah. Videos for this course were filmed at the USFRA's annual World of Speed event under the coordination of LandSpeed Productions, a recognized expert in the sport of land speed racing.

## CES: Creative and Critical Thinking

## Cutting Edge Science: CES: Engineering Series

Course Code: LI.CES.300612.0.NP
Has Textbook: No
Course Length: 1 Semester
CES: Creative and Critical Thinking is a four-unit course in which students will explore how and why we think critically and creatively and how engineers, scientists, and professionals in other technical careers benefits from developing these skills. Through this course, students will explore and develop their own critical and creative thinking processes as well as engage in their own inquiry, investigation, and discovery. While the course supports the CES Engineering Series, it explores a wide range of topics including self-awareness, attitudes and beliefs, and system (holistic) thinking.

## AP/Advanced Calculus Part 1

## Advanced Placement

AP/Advanced Calculus Part 1 teaches a balanced approach to problem solving, using analytical, algebraic, numerical, graphical, and verbal/written methods of representing problems. This course begins with a brief review of linear, polynomial, exponential, parametric, logarithmic, and trigonometric functions. Students will study all topics associated with limits and continuity. Student will also study derivatives of a variety of functions (i.e., polynomial, trigonometric and inverse trigonometric, exponential, and logarithmic), as well as learn how to apply the chain rule and implicit differentiation. The course closes with a study of extreme values and the Mean Value Theorem.

This course meets the Advanced Placement criteria required by the College Board.
*Note: AP/Advanced Calculus Parts 1 and 2 are required for the AP Calculus AB exam.

## AP/Advanced Calculus Part 2

## Advanced Placement

Course Code: LI.MAT.400111.2.PE
Has Textbook: Yes
AP/Advanced Calculus Part 2 begins with additional topics related to derivatives, specifically first and second derivatives and their graphs. The study of derivatives concludes with optimization, linearization, and related rates. Students will study definite integrals and area under a curve. The topics include antiderivatives, the Fundamental Theorem of Calculus, the trapezoidal rule, slope fields, and antidifferentiation by substitution. The course concludes with the application of definite integrals. Students will study the integral as an accumulation function, the area under a curve, and the volume of a surface of revolution.

This course meets the Advanced Placement criteria required by the College Board.
*Note: AP/Advanced Calculus Parts 1 and 2 are intended to prepare students for the AP Calculus AB exam.

## AP/Advanced Calculus Part 3

## Advanced Placement

Course Code: LI.MAT.400111.3.PE
Has Textbook: Yes
Course Length: 1 Semester
AP/Advanced Calculus Part 3 prepares students for the BC part of the AP Calculus exam and meets the Advanced Placement criteria required by the College Board. AP/Advanced Calculus Part 3 builds on the concepts learned in AP/Advanced Calculus Parts 1 and 2. Students will study limits in indeterminate forms, L'Hôpital's Rule, growth rates of functions, and indefinite integrals. Also, students will study a variety of sequences and series, polynomials of infinite degree, and their derivatives and integrals. Taylor series and MacClaurin series, as well as tests for convergence and divergence, will be covered. The course closes with parametric functions, vectors, and polar coordinates.

HIGH SCHOOL

## AP/Advanced English Literature Part 1

## Advanced Placement

Course Code: LI.ENG.403010.1.PE
Has Textbook: Yes
Course Length: 1 Semester
AP/Advanced English Literature is an accelerated course meant to prepare students who plan to take the Advanced Placement exam. This course meets the Advanced Placement criteria required by the College Board. In this course, students will write extensively and will apply their writing knowledge in creating several types of critical analyses, including biographical, historical, mythological, psychological, and formalist analyses. Students will also read challenging literary selections ranging from classical to modern times, such as Robert Browning's "My Last Duchess" and Kurt Vonnegut, Jr.'s "Harrison Bergeron." In this section of AP/Advanced English Literature, students will review works across the genres of short fiction and poetry. Following a rigorous semester timeline, students will also review and practice skills, techniques, and procedures to prepare them for the Advanced Placement English Literature and Composition Exam. Some of the literary works used in this course involve mature themes.

HIGH SCHOOL

## AP/Advanced English Literature Part 2

## Advanced Placement

Course Code: LI.ENG.403010.2.PE
Has Textbook: Yes
Course Length: 1 Semester
AP/Advanced English Literature Part 2 is a continuation of the accelerated course meant to prepare students who plan to take the Advanced Placement exam. It also meets the Advanced Placement criteria required by the College Board. The course begins by introducing students to a wide range of British poets, starting with the metaphysical poets of the Renaissance and ending with contemporary British poets. Studies will focus on literary periods such as Gothic Romanticism, the Romantic Hero, the Victorian Age, War Poetry, and Post-Modernism. Students will continue to read challenging literary selections that span multiple genres from classical to modern times. Some examples of these works include Oedipus the King and A Midsummer Night's Dream. Students will review pieces of literature that follow a common theme, and they will also submit criticisms to demonstrate thorough comprehension. Some examples of these readings include Henrik Ibsen's A Doll's House and Ayn Rand's novella Anthem. Students are expected to write extensively in this course and to apply prior writing knowledge to their responses. Some of the literary works used in this course involve mature themes.

HIGH SCHOOL

## AP/Advanced Spanish Part 1

## Advanced Placement

Course Code: LI.WLS.401209.1.PE
Has Textbook: Yes

## Course Length: 1 Semester

AP/Advanced Spanish is an accelerated course meant to prepare students who plan to take the Advanced Placement exam. This course meets the Advanced Placement criteria required by the College Board. To earn the AP designation, students must successfully complete both Part 1 and Part 2 of this course in addition to the required weekly office hours. AP/Advanced Spanish Part 1 will develop students' listening, reading, speaking, and writing skills, as well as their understanding of Hispanic culture. Students will read and analyze authentic texts, including narratives, novel excerpts, modern articles, Internet resources, and documents concerning current events. Students will also listen to and respond to authentic recordings. Students will practice and apply advanced grammar and syntax, as well as precise vocabulary, to express themselves more accurately in a variety of contexts. The students will participate in weekly, real-time online "charlas," or chats, in which they will engage in contemporaneous conversations and discussions with each other and the teacher. These meetings will focus on spontaneous language tasks based on a variety of situations and themes.
Students will initiate and close conversations, negotiate meaning, ask and respond to questions, give and receive directions, and present and support opinions. Students' conversational abilities will be critiqued by the instructor based on their ability to meet the standard of high-level proficiency. Feedback will be provided. This course includes auditory comprehension assessments that require students to listen to audio files and record themselves speaking. For both parts of this course, it is essential that students have either a headset equipped with a microphone or access to an internal microphone within their computers.

## AP/Advanced Spanish Part 2

## Advanced Placement

Course Code: LI.WLS.401209.2.PE
Has Textbook: Yes

## Course Length: 1 Semester

AP/Advanced Spanish is an accelerated course meant to prepare students who plan to take the Advanced Placement exam. This course meets the Advanced Placement criteria required by the College Board. To earn the AP designation, students must successfully complete both Part 1 and Part 2 of this course in addition to the required weekly office hours. Students will continue to read and analyze authentic texts such as poems, narratives, play excerpts, modern articles, Internet resources, and documents concerning current events. Students will listen to and respond to authentic recordings. They will also interact with various resources to continue to build their knowledge of Hispanic culture. Students will practice and apply advanced grammar, syntax, and precise vocabulary to express themselves more accurately in a variety of contexts. Students will participate in weekly, real-time online "charlas," or chats, in which they will engage in contemporaneous conversations and discussions with each other and the teacher. These meetings will focus on spontaneous language tasks based on a variety of situations and themes. Students will initiate and close conversations, negotiate meaning, ask and respond to questions, give and receive directions, and present and support opinions. Students' conversational abilities will be critiqued by the instructor based on their ability to meet the standard of highlevel proficiency. Feedback will be provided. This course includes auditory comprehension assessments that require students to listen to audio files and record themselves speaking. This course includes auditory comprehension assessments that require students to listen to audio files and record themselves speaking. For both parts of this course, it is essential that students have either a headset equipped with a microphone or access to an internal microphone within their computers.

