

Introduction

We are pleased to provide this overview of the fourth grade academic program at Lexis Prep. Our carefully developed curriculum provides Lexis Prep students with a strong college-prep education in the setting of personalized instruction.

The following guide gives an overall picture of what a Lexis Prep student will learn in fourth grade. The individual learner and classroom needs will determine how the guide is implemented in the classroom.



English Language Arts and Reading



Students at Lexis Prep benefit from an English Language Arts and Reading curriculum that teaches students not just how to read and write, but also the meaning and purpose of what they are learning. The Lexis Prep curriculum utilizes the *Imagine It!* program which is correlated to the national standards put forth by the National Reading Panel. This curriculum includes the areas of: Literature; Informational Text; Language; Speaking and Listening; and Writing. The standards offer a focus for instructional practices and strategies and help ensure students gain adequate exposure to a range of learning opportunities.

The *Imagine It!* English Language Arts and Reading program thoroughly addresses the five key areas of reading: phonemic awareness; systematic, explicit phonics; fluency; vocabulary; and comprehension. The curriculum lays the foundation of

reading skills, provides practice increasing confidence, assesses progress, provides additional help and challenges, guides through inquiry, questioning, investigating and exploring, teaches writing strategies, offers a variety of genres, and bolsters instruction with the use of technology resources.

Reading Standards for Literature

Key Ideas and Details

- Draw on details and examples from a text to support statements about the text
- Summarize a text and derive a theme of a story, drama, or poem from details in the text
- Describe in detail a character, event, or setting, drawing on specific details in the text

Craft and Structure

- Understand words and phrases in a text that allude to significant characters found in mythology
- Explain major differences between poems and prose, and refer to the structural elements of poems
- Compare the point of view from which different stories are narrated

Integration of Knowledge and Ideas

- Integrate information from several illustrations and text to setting, characters and plot
- Compare and contrast thematically similar tales, myths, and accounts of events from cultures

Range and Level of Text Complexity

- Read independently, proficiently, and fluently literature appropriately complex for fourth to fifth grade

Reading Standards for Informational Text

Key Ideas and Details

- Draw on details and examples from a text to support statements about the text
- Determine the main idea and supporting details of a text; summarize the text
- Describe the sequence of events in an historical or scientific account in a text

Craft and Structure

- Learn and determine the meanings of general academic language in a fourth grade topic or subject area
- Use text features and search tools to locate and process information relevant to a given topic
- Compare an eyewitness account to a secondhand account of the same event or topic

Integration of Knowledge and Ideas

- Interpret and explain factual information presented graphically or visually
- Explain how an author uses evidence to support his or her claims in a text
- Describe how two or more texts on the same subject build on one another

Range and Level of Text Complexity

- Read informational texts independently, proficiently, and fluently within the fourth to fifth grade text complexity band; read texts at the high end of the range with scaffolding as needed

Language Standards

Conventions in Writing and Speaking

- Observe conventions of grammar and usage
- Observe conventions of capitalization, punctuation, and spelling
- Make effective language choices

Vocabulary Acquisition and Use

- Determine word meanings based on fourth grade reading
- Understand word relationships
- Use words that are in common, conversational vocabulary as well as grade-appropriate

Speaking and Listening Standards

Comprehension and Collaboration

- Initiate and engage in group discussions on fourth grade topics and texts being studied in class
- Paraphrase the key information or ideas presented graphically, visually, orally, or multi-modally
- Identify the claims and supporting evidence used by a speaker or a presenter

Presentation of Knowledge and Ideas

- Present report on events, topics, or texts using appropriate facts and details to support the main idea
- Incorporate visual displays and digital media into presentations when appropriate
- Differentiate between contexts and situations calling for formal and/or informal English

Writing Standards

Text Types and Purposes

- Write opinions on topic of concrete issue using organization, reasons, facts, and closure
- Write informative and explanatory pieces with topic, details, appropriate grammar, and closure
- Write narratives introducing characters, behaviors, dialogue, sequence, and closure

Production and Distribution of Writing

- Provide coherent and clear writing with organization, development, substance, and style
- Strengthen writing as needed by planning, revising, and editing
- Use technology to produce, publish, and interact with others about writing

Research to Build Knowledge

- Perform short, focused research tasks that build knowledge through investigation of a single topic
- Gather relevant information from experience, print, digital sources, and notes and write bibliography
- Write response to literary or informational sources, drawing evidence from text to support analysis

Range of Writing

- Write routinely over extended time frames for a range of tasks, purposes, and audiences

Mathematics

The goal of the Lexis Prep K-4 mathematics program is for our students to develop the ability to think and reason mathematically and use mathematics to solve problems in authentic contexts. The expectation is that they will achieve mathematical proficiency through the mastery of mathematic skills, concepts, and processes. This goal is met through the opportunity to develop, practice and review concepts over time. Lexis Prep students move from the concrete to the pictorial to the abstract through a deliberate sequence of instruction. Our students' regular exposure to critical thinking and problem solving prepares them for real world applications.

The Lexis Prep mathematics curriculum is aligned with both the National Council for Teaching Mathematics (NCTM) Standards and Benchmarks as well as Saxon Math. The standards outlined below show the general progression of topics over the course of the school year. Parents can be confident their child will receive thorough mathematics instruction.



Lexis Prep Math Standards Correlated with NCTM Standards and Saxon Math

Number and Operations and Algebra

- Develop quick recall and fluency of multiplication facts and related division facts
- Use multiplication to develop quick recall of basic multiplication facts and related division facts
- Use multiplication, place value, and properties of operation to multiply multi-digit whole numbers

- Select and apply methods to estimate products or calculate them mentally depending on context
- Develop fluency with efficient procedures for multiplying whole numbers to solve problems

Number and Operations

- Understand decimals, including the connections between fractions and decimals
- Understand decimal notation as an extension of the base-ten system of writing whole numbers
- Relate fractions to reading and writing decimals that are greater than or less than one
- Identify equivalent fractions and decimals with comparing, ordering, estimating and problem solving
- Connect equivalent fractions and decimals by comparing models to symbols and number lines

Measurement

- Develop an understanding of area and determine the areas of two dimensional shapes
- Recognize area as an attribute of two dimensional regions
- Understand quantifying area by finding the total number of same-sized units without gaps or overlaps
- Understand that a square that is 1 unit on a side is the standard unit for measuring area
- Select units, strategies and tools for solving problems involving estimating or measuring area
- Use multiplication to justify the formula for area of a rectangle

Algebra

- Identify, describe, and extend numeric and nonnumeric patterns involving all operations
- Understand the use of a rule to describe a sequence of numbers or objects

Geometry

- Understand properties of two dimensional shapes as they find the areas of polygons
- Understand symmetry and congruence to encompass transformations
- Use transformations to design and analyze simple tilings and tessellations

Measurement

- Understand two dimensional shapes to measure and classify angles

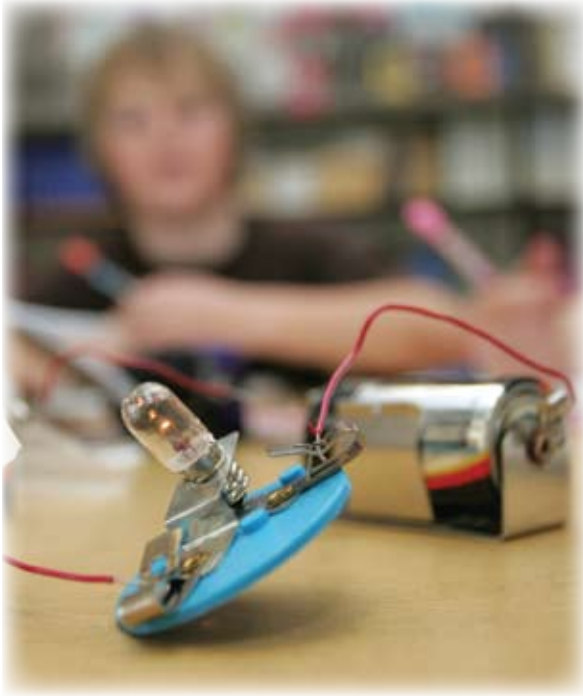
Data Analysis

- Use tools to solve problems by making frequency tables, bar graphs, picture graphs, and line plots
- Apply the understanding of place value to develop and use stem-and-leaf plots

Number and Operations

- Understand place value and ways of representing numbers to 100,000 in various contexts
- Use estimation to determine the relative sizes of amounts or distances
- Understand multi-digit division as inverse multiplication, partitioning and subtraction
- Use decimals to extend the ability to recognize equivalent fractions
- Use models of fractions, multiplication and division with facts for equivalency and simplifying fractions

Science



The Lexis Prep science program provides students with opportunities to think and act like scientists. Lexis Prep students acquire scientific knowledge, practice science process skills, and apply science concepts through reading and observing, as well as by conducting investigations that have real-world applications.

Fourth grade science is organized into four disciplines: life science, physical science, earth and space science, and science and technology. All science outcomes are aligned to the National Science Education (NSE) Standards.

Lexis Prep utilizes Delta Education which provides a kit-based curriculum and instructional resources that correlate with state standards. Delta Education provides the expertise to ensure the best combination of materials are selected for each grade level in order to align the Lexis Prep curriculum with the science concepts, inquiry nature, and developmental appropriateness reflected in the state standards.

Lexis Prep Science Standards Correlated with NSE and Delta Education

Unit 1: Electrical Circuits

Students explore **Electrical Circuits** with twelve hands-on activities and the Delta Science Reader. Students begin by mastering simple open and closed circuits and then progress to constructing parallel and series circuits. They investigate the factors, besides switches, that affect the flow of current. Students design circuit testers to determine how well certain solids and liquids conduct electric current. They demonstrate resistance by comparing the bulb brightness produced by different wires. For fun, students create circuit puzzles to outwit one another with hidden configurations. They also learn to depict their own sophisticated electrical setups with circuit diagrams.

In the Delta Science Reader *Electrical Circuits*, students read about electric charge, electric current, electrical circuits, and two ways in which electricity and magnetism are related. The book also presents biographical sketches of key innovators in this field, Thomas Alva Edison, Alexander Graham Bell, and Lewis Howard Latimer, and describes the work of an electrician. Students discover how water power is used to make electricity and how much energy various household appliances use.

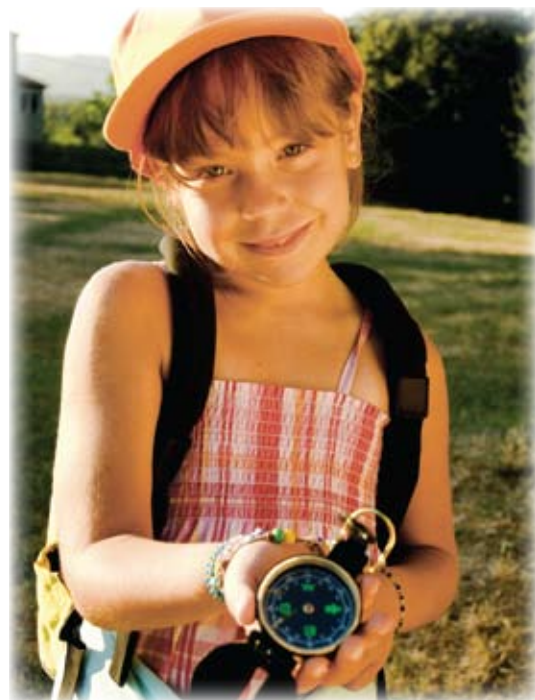
Unit 2: Insect Life

Careful observations of three kinds of insects introduce students to the ABCs of **Insect Life**: attributes, behaviors, and cycles. First, students examine the unique characteristics common to all insects and, with the help of a scientific key, learn to identify many species. They conduct experiments to determine insects' environmental preferences and adaptive features, such as camouflage and mimicry. Finally, over extended periods of time, students observe the simple metamorphosis of crickets (egg-nymph-adult) and the complete metamorphosis of mealworms and butterflies (egg-larva-pupa-adult). To apply their knowledge of insects, students consider how these numerous and diverse organisms, living in every environment, can be both helpful and harmful.

Unit 3: Magnets

Students discover the Law of Magnetic Attraction and much more about the principles that govern **Magnets**, magnetic behavior and interaction. They experiment with magnets of various sizes and shapes to explore this invisible but observable force. Students discover which materials are attracted to magnets and which can “block” the passage of magnetic force. They demonstrate magnetic fields and polarity using iron filings. Students then make compasses that align with Earth’s magnetic poles. They model temporary magnetism and use a simple circuit and an iron nail to create an electromagnet. A space shuttle video challenges students to consider the applications of magnets in our technological society.

In the Delta Science Reader *Magnets*, students read about magnets and magnetic fields. They learn how magnets are made, how magnets can create electricity, what magnets are used for, and how Earth is like a magnet. They also read about Michael Faraday, the famous nineteenth-century scientist who invented the electric motor and the electric generator, both of which use magnets. Finally, students learn about applications of magnets in magnetic resonance imaging (MRI) and maglev trains.



Unit 4: Solar System

Students gain perspective on the physical relationships between objects in our **Solar System**. First, students become familiar with the names and positions of the nine planets, researching one planet and sharing information with the class. Next, combining geometry and astronomy concepts, students study ellipses and planetary orbits, then circles and planet shapes. Model planets and a classroom-size model of the solar system dramatize the relative sizes and distances of our cosmic neighborhood. The unit introduces students to some of the satellites in our solar system such as asteroids, meteoroids, and comets. Lastly, students study stars and their celestial patterns, the constellations that have intrigued sky-gazers for millennia.

In the Delta Science Reader *Solar System*, students take a tour of the sun and the nine planets. Other space objects such as comets, asteroids, and meteoroids are explored. Students read about the rotation and revolution of the planets and the causes of night and day, seasonal changes, and the phases of the moon. The book describes the work of a planetary geologist. Lastly, students discover how telescopes work.

Unit 5: Water Cycle

Students build a comprehensive, pictorial chart that shows the continuous movement of water between Earth and the atmosphere known as the **Water Cycle**. Each addition to the chart is based on inquiry and investigation, as students explore evaporation, condensation, and precipitation. They create rainbows, measure humidity, and model clouds. In classroom terrariums, students observe that soil, plants, and a mini-pond are the sources of water vapor. Teams assemble closed water chambers in which rain falls and rivers flow.

In the Delta Science Reader *Water Cycle*, students read about why Earth is called the water planet. They find out about salt water and fresh water and where each kind of water is found. They observe how water changes form by freezing, melting,

evaporating, and condensing. Students trace the water cycle and find out how heat energy from the sun is related to the water cycle. They learn how Earth's weather is affected by the water cycle. Students also read about Luke Howard, the scientist who first classified clouds. Finally, students investigate water as a natural resource.

Unit 6: Weather Instruments

Students explore **Weather Instruments** as they measure weather conditions using kit tools and devices of their own making. Observations begin with temperature and students compare Fahrenheit and Celsius scales and take thermometer readings twice a day. They investigate air pressure and barometers, and construct wind vanes and record wind direction and wind strength. Experiments with evaporation and condensation lead to humidity tests, cloud classifications, and indoor precipitation. From their own data, students draw conclusions about connections among the weather factors. They learn how and why today's factors reliably predict tomorrow's weather.

In the Delta Science Reader *Weather Instruments*, students read about what weather is and what factors cause changes in the weather. Various weather tools, such as the thermometer, barometer, wind vane, anemometer, hygrometer, and rain gauge are described. The book presents biographical sketches of key scientists in this field such as Gabriel Fahrenheit, Anders Celsius, and Sir Francis Beaufort. Students learn about the work of airport meteorologists. Lastly, they read about wind chill and how a thermometer works.

Social Studies

Lexis Prep students enjoy *Regions of Our Country*, the TCI *Social Studies Alive!* curriculum for fourth grade. *Social Studies Alive!* consists of a series of instructional practices that allow students of all abilities to master key social studies concepts. The *Social Studies Alive!* approach is characterized by eight features: theory and research based active instruction, standards based content, preview assignments, multiple intelligences teaching, considerate text, graphically organized reading notes, processing assignment, and assessments to inform instruction.

The National Council for the Social Studies (NCSS) has organized grade level content into Ten Thematic Units of Instruction that form the framework of the social studies standards. All ten themes are found at each grade level of *Social Studies Alive!* with specific themes enhanced at different grade levels. The focal themes in fourth grade are bolded below.

- **Culture**
- Time, continuity, and change
- **People, places, and environments**
- Individual development and identity
- Individuals, groups and institutions
- **Power, authority, and governance**
- Production, distribution, and consumption
- Science, technology and society
- Global connections
- Civic ideals and practices



The Lexis Prep social studies curriculum is content and benchmark aligned with the NCSS thematic units. Where objectives overlap with other grade levels, the objectives are met using different age-appropriate content and activities at each grade level.

Lexis Prep Social Studies Standards Correlated with NCSS and *Social Studies Alive!*

Unit: Regions of Our Country

- Understand human behavior with economics, geography, political science, and history
- Apply basic map skills to learn about the regions of the United States
- Explain how American Indians, Latinos, European Americans, African Americans, and Asian Americans came to this country and contributed to its growth and development
- Learn about the Northeast region of the United States
- Understand how population density in the Northeast affects the lives of the people who live there
- Learn about the Southeast region of the United States by taking imaginary boat and bus trips
- Explain how geography affects life in the Southeast region
- List key concepts and facts about the Midwest region of the United States
- Describe how agriculture in the Midwest has changed from 1800 to today
- Learn about the Southwest region of the United States
- Explore the history of how people have used and shared the water of the Colorado River during four different time periods
- Understand the key concepts of the West region of the United States
- Learn about seven cities in the West using research skills, tools and strategies
- Research the geography of their state using maps, atlases, library books, and the Internet
- Investigate their state's history using research, creating models, and writing
- Understand their state's economy through research
- Learn about their state's government and legislative process

National Standards for Visual Arts



The National Standards for Arts Education were developed by the Consortium of National Arts Education Associations. They describe the learning outcomes recommended as an integral part of a comprehensive K-12 education for all American students. The content standards for K-4 visual arts education include:

- Understand and apply media, techniques and processes
- Use knowledge of structure and functions
- Choose and evaluate a range of subject matter, symbols, and ideas
- Understand the visual arts in relation to history and cultures
- Reflect upon and assess the characteristics and merits of their work and the work of others
- Make connections between visual arts and other disciplines

National Standards for Music Education

The National Standards for Arts Education were developed by the Consortium of National Arts Education Associations. They describe the learning outcomes recommended as an integral part of a comprehensive K-12 education for all American students. The content standards for K-4 music education include:

- Sing, alone and with others, a varied repertoire of music
- Perform on instruments, alone and with others, a varied repertoire of music
- Improvise melodies, variations, and accompaniments
- Compose and arrange music within specified guidelines
- Read and notate music
- Listen to, analyze and describe music
- Evaluate music and music performances
- Understand relationships between music, the other arts, and disciplines outside the arts
- Understand music in relation to history and culture



National Standards of Physical Education



The National Association for Sport and Physical Education (NASPE) defines five major focus areas specifying what a physically educated person is capable of performing. These focus areas are:

- Learn skills necessary to perform a variety of physical activities
- Be physically fit
- Participate regularly in physical activity
- Know the implications of and the benefits from involvement in physical activities
- Value physical activity and its contribution to a healthful lifestyle

The Difference Maker: Lexis Accent

Customizing is the Key to Success for Each Child

The hallmark of a Lexis Prep education is our personalized approach called Lexis Accent. We know some students need an extra emphasis in their academic program and Lexis Accent is our tool to do that. This customization may include special one-on-one and small group sessions during the school day. These specialized sessions give the Lexis Prep staff the opportunity to focus on the particular learning needs of every child.



Writing - Students receive extra support in the writing process from draft to final copy, including areas such as voice, style, conventions, and research skills.

Reading - A focused time spent on phonemic awareness, systematic phonics instruction, decoding, fluency, and comprehension.

Math - Students use manipulatives while receiving extra instruction in order to ensure mastery of all mathematics concepts.

Social Skills - Students learn practical strategies for developing appropriate friendships, understanding social nuances, and being comfortable in social situations.

As part of the enrollment process, your child will be evaluated to determine if he would benefit from personalized time in any of these areas. If so, it will be included as part of his education plan. There is no additional charge for these classes as we have found the Lexis Accent program is key to ensuring success in a college prep program.

Your child may also work with an Occupational Therapist, Speech Therapist, Physical Therapist, or Counselor at Lexis Prep. These are provided by a third party and there is an extra charge for these services.



Executive Function: Prepare for a Lifetime of Success

The ability to self-regulate is essential for success in life. At Lexis Prep, we call this executive function, a well-known concept that entails many different skills and abilities. Children with ADD or ADHD frequently struggle in this area so we put special emphasis on developing this skill in all our students.

According to Joyce Cooper-Kahn and Laurie Dietzel (*Late, Lost and Unprepared*), executive function can be defined as “a set of processes that all have to do with managing oneself and one’s resources in order to achieve a goal. It is an umbrella term for the neurologically-based skills involving mental control and self-regulation.” Skills and abilities that make up executive function include self-monitoring, planning, organization, emotional control, initiation, shifting, and working memory.

All Lexis Prep students spend time each day learning and practicing these critical executive function skills. Executive function is built into our curriculum and is also explicitly taught with the goal of helping every student effectively develop and utilize these important life skills.



10 Essential Elements of the Lexis Prep Success Model

UHA!

At Lexis Prep, our mission is summarized by UHA!: To Understand, Honor and Accommodate diverse learners and do it with a passion! Everything we do flows from the UHA! principles. This includes the 10 Essential Elements of the Lexis Prep Success Model.

1. A Customized Curriculum

Each child has a unique learning style. A child learns best when teaching is personalized to fit the way he learns, rather than forcing him to learn the way the school teaches. At Lexis Prep, every teacher strives to understand how your child learns best and to utilize that style in every teachable moment. Our Lexis Accent Program customizes the educational program further by strengthening those specific areas that need more attention.

2. High Academic Expectations

A Lexis Prep education is never watered down. It is a solid, age-appropriate, college preparatory experience that will prepare your child well for further studies. Our academics are research-based and multisensory.

3. Integrated Executive Function Skills

Executive function is the ability to plan and organize oneself to accomplish a goal. Your child will learn executive function skills in every aspect of his education to best prepare him for future education opportunities as well as life beyond school. It is the first thing we think about when we interact with a child and it is the last thing we teach at the end of every day.

4. Painless and Intelligent Homework

It is imperative that your child learn how to effectively manage homework before entering high school and college so we focus on developing these critical skills. Homework at Lexis Prep is individualized, manageable, and relevant. It is never busy work and should not be a source of frustration.

5. Passionate and Highly Qualified Teachers

Our teachers are passionate, experienced, and dynamic. Most of our teachers have specialized training, a masters degree or both. They receive regular training in order to continually develop their teaching and assessment skills.

6. Collaboration with Medical and Educational Providers

At Lexis Prep, we are part of a team working together to ensure your child's success. This includes coordination with other professionals, including physicians who are managing medication, psychologists and counselors, speech and language specialists, occupational therapists, and outside tutors.

7. Constant Evaluation of Academic Progress

Our teachers constantly evaluate each student's academic progress. This is done through daily assessments, anecdotal observations, and more formalized testing such as the NWEA MAP assessment given three times each year.

8. Manage the Environment, Not the Child

At Lexis Prep, we believe success is largely dependent on managing the environment. We emphasize routines and transitions throughout the day. When a difficulty arises, we analyze the antecedents in order to determine where changes might be needed.

9. Partner with Parents

A strong partnership with parents is critical to the success of each student. This partnership begins with the initial interview and continues with daily communications, a monthly open forum for all parents, and parents visiting the classroom.

10. We Make It Fun!

Learning should be enjoyable. Children who pursue education (rather than endure it) will be far more successful in the future. At Lexis Prep, we provide a great college prep education and enjoy ourselves every day in the process.