

Introduction

We are pleased to provide this overview of the second 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 second 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: Foundational Skills; 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 Foundational Skills

Print Concepts and Phonics and Word Recognition

- Know and apply grade-level phonics and word analysis skills in decoding words

Fluency

- Read with sufficient accuracy and fluency to support comprehension

Reading Standards for Literature

Key Ideas and Details

- Ask questions such as who, what, where, when, and why and demonstrate understanding details in a text
- Paraphrase stories, fables, folktales, or myths from diverse cultures and determine lessons or morals
- Describe how characters in a story respond to key events and conflicts

Craft and Structure

- Identify words and phrases that supply rhythm and meaning in a story, poem, or song
- Write and speak when referring to core elements of stories, plays, and myths
- Distinguish between characters by speaking in a different voice

Integration of Knowledge and Ideas

- Explain how images and illustrations contribute to and clarify a story
- Compare and contrast characters or events from different stories addressing similar themes

Range and Level of Text Complexity

- Read independently, proficiently, and fluently literature appropriately complex for second to third grade

Reading Standards for Informational Text

Key Ideas and Details

- Ask and answer questions such as who, what, where, when, and why and demonstrate understanding of key information in a text
- Identify the main focus of specific and multi-paragraph text
- Describe the connection between two or more historical events or scientific concepts in a text

Craft and Structure

- Learn and determine meanings of words and phrases encountered in text relevant to second grade
- Know and use various text features to locate key facts or information
- Identify the main purpose of a text

Integration of Knowledge and Ideas

- Explain how images and illustrations contribute to and clarify a text
- Describe how specific causes link key events or ideas together in a text
- Describe similarities in and differences between two texts on the same topic

Range and Level of Text Complexity

- Read informational texts independently, proficiently, and fluently

Language Standards

Conventions in Writing and Speaking

- Observe conventions of grammar and usage
- Observe conventions of capitalization, punctuation, and spelling

Vocabulary Acquisition and Use

- Determine word meanings
- Understand word relationships
- Use newly learned words acquired through conversations, reading, and responding to texts

Speaking and Listening Standards

Comprehension and Collaboration

- Engage in group discussions on second grade topics and texts being studied in class
- Retell key details or ideas presented orally or through media
- Ask and answer questions about information presented orally or visually

Presentation of Knowledge and Ideas

- Recount stories or experiences with appropriate facts and descriptive details
- Produce complete sentences when appropriate to task and situation

Writing Standards

Text Types and Purposes

- Write opinions in which the topic or book is introduced and provide reasons and details to support opinions, using words to link opinions and reason(s) and provide a sense of closure
- Write informative and explanatory texts introducing a topic, using facts, definitions and closure
- Write narratives in which they recount a well-elaborated event or series of events

Production and Distribution of Writing

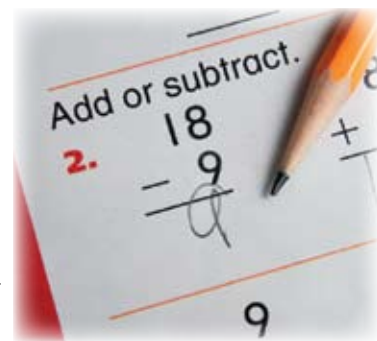
- Revise and edit writing as needed
- Use technology to produce writing

Research to Build Knowledge

- Participate in shared research and writing projects
- Gather information from experiences or provided text

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

- Develop an understanding of the base-ten numeration system and place-value concepts to 1,000
- Demonstrate an understanding of base-ten numeration, counting in units that are multiples of hundreds, tens, and ones
- Compare and order numbers
- Understand multi-digit numbers in terms of place value
- Recognize place-value notation is a shorthand for the sums of multiples of powers of 10

Number and Operations and Algebra

- Develop recall and use fluency with addition facts and related subtraction facts
- Understand addition to develop quick recall of basic addition facts and related subtraction facts
- Solve arithmetic problems by applying understanding of models of addition and subtraction
- Develop adding and subtracting multi-digit whole numbers with accuracy and efficiency
- Select and apply appropriate methods to estimate sums and differences or calculate them mentally
- Develop fluency with efficient procedures for whole numbers with problem-solving

Measurement

- Develop an understanding of linear measurement and facility in measuring lengths

- Develop an understanding of the meaning and processes of measurement, including partitioning
- Understand linear measure as an iteration of units using rulers and other measurement tools
- Understand the need for equal length using standard and metric units
- Understand the inverse relationship between size and number of units used in measurement
- Use place value and properties of operations to create equivalent representations of given numbers
- Write, compare, and order multi-digit numbers
- Add and subtract solving problems using measurement, geometry, data, and non-routine problems
- Develop initial understandings of multiplication as repeated addition

Geometry and Measurement

- Estimate, measure, and compute lengths, solving problems involving data, space, and movement
- Compose and decompose two-dimensional shapes
- Use geometric knowledge and spatial reasoning for understanding area, fractions and proportions

Algebra

- Use number patterns to extend knowledge of the properties of numbers and operations

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.

Second grade science is organized into four disciplines: life science, physical science, earth 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: Butterflies and Moths

Students explore the colorful, captivating world of **Butterflies and Moths**. From tiny larvae on beds of food to fluttering adults in a mesh tower, butterflies and moths grow and develop in the classroom. Teams of two raise a painted lady butterfly and a wax moth, observing metamorphosis from larva to pupa to adult. When adults emerge from chrysalis and cocoon, students study their features and behaviors. Students record observations in logbooks and learn about survival adaptations, camouflage, mimicry, and ultrasensitivity to odors. The unit includes a field trip to collect and identify wild larvae, as well as hints for distinguishing between butterflies and moths at every stage of their life cycles.

In the Delta Science Reader *Butterflies and Moths*, students read about the life cycles of butterflies, moths, and other insects. They learn the identifying characteristics of all insects. They discover the similarities and differences between moths and butterflies. Students also read about a biologist who studies Monarch butterflies and find out about the amazing migration of the Monarch butterfly.

Unit 2: Force and Motion

Students explore **Force and Motion** with twelve hands-on activities and the Delta Science Reader. Students use a Delta Education tool, a push-pull meter, to measure force. They compare the relative work of moving identical objects different distances and different objects identical distances. Students then discover how simple machines make work easier by reducing the amount of force needed. They lift with levers, roll with wheels and axles, and raise with fixed and movable pulleys. They drag loads up inclined planes, separate objects with wedges, and secure wood blocks with screws. In a teacher demonstration, students see how a spring scale works. Young scientists crank gears, decrease friction, and investigate household gadgets to identify what makes them labor-saving devices.

In the Delta Science Reader *Force and Motion*, students read about the relationship between force, motion, and work. They discover how the six simple machines (lever, wheel and axle, pulley, inclined plane, wedge, and screw) help people do work

by moving objects easier, faster, or farther. They also read about people in science, bicycle inventors, and how they created ways to make the bicycle an increasingly more complex (and safe) machine. Finally, students find out how the waterwheel works and how friction affects motion.

Unit 3: Soil Science

Students take to the schoolyard with trowels in hand to explore **Soil Science**. Several weeks later, they are familiar with sampling techniques and soil components, weathering and erosion, minerals and nutrients, and more. Students separate soil into particle layers and classify soil types according to estimated proportions. Once they understand what soil is, they find out how it is made by modeling weathering by plants and water. Next, students observe how earthworms mix and enrich soil. They discover that nutrient-rich soil helps plants grow, and plants, in turn, help soil resist erosion. Grass gardens, pollution detectors, worm farms, and erosion models offer strong hands-on experiences.

In the Delta Science Reader *Soil Science*, students read about the composition and characteristics of different types of soil. They learn about the effects of weathering and erosion in producing and changing soil. They find out about ways that people both harm and protect this vital natural resource. Students also read about soil scientists and their work. Finally, students learn how earthworms keep soils rich and productive.

Unit 4: States of Matter

In **States of Matter**, students begin to see and classify the objects in the world around them. They use hands-on experiences with blocks, balloons, and beakers to identify the distinctive properties of the three common states of matter. With a variety of lab tools they observe, explore, and measure solids, liquids, and gases, and investigate the processes by which one changes into another. As students conduct melting, freezing, evaporation, and condensation experiments, they learn the importance of controlling variables and keeping records.

The Delta Science Reader *States of Matter* introduces students to matter and its physical properties. Students learn about three states of matter: solid, liquid, and gas. They read about changing from one state to another by melting, freezing, evaporation, and condensation. Students meet two scientists who work with matter in different states: one at a crayon factory and another in Antarctica. Lastly, they discover how heating gases keeps a hot air balloon afloat.

Unit 5: Weather Watching

Students explore **Weather Watching** by learning how to observe, describe, and measure aspects of weather using key science vocabulary, weather instruments, and scientific understanding. After brainstorming why weather changes from day to day, season to season, and place to place, students investigate temperature and wind strength. They construct rain gauges, lightning rods, and wind socks. Students discover which cloud formations predict which weather patterns and they explore the causal conditions for such phenomena as rainbows, thunderstorms, and snowflakes. Students even model tornadoes, track hurricanes, and interpret weather maps.

In the Delta Science Reader *Weather Watching*, students explore what weather is and what causes it to change. They read about the water cycle and various weather tools, such as the thermometer, barometer, wind vane, rain gauge, and anemometer. The book explains how weather changes according to the seasons. Tornadoes, hurricanes, blizzards, and thunderstorms are discussed. In a biographical sketch, students meet Ben Franklin, and they also find out about the work of a meteorologist. Finally, students explore how weather satellites collect weather data from space.

Social Studies

Lexis Prep students enjoy *My Community*, the TCI *Social Studies Alive!* curriculum for second 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 second grade are bolded below.

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

- Define a community as a place where people live, work, play, and solve problems together
- Describe urban, rural and suburban communities including their features, advantages, and disadvantages
- Learn about maps and map tools
- Demonstrate that communities have different geographic features identified on a physical map
- Explore how people use (and misuse) the environment and the effects of pollution
- Learn how goods are produced, distributed and transported to stores
- Learn about people who provide services in a community
- Distinguish between economic needs and wants and explain the importance of consumers spending wisely
- Explain how communities change both through growth and making a neighborhood better
- Analyze images of San Francisco in 1846, 1849 and in 1906 during the earthquake
- Propose possible solutions to given community problems
- Make predictions about what community leaders can do
- Learn how to be good citizens in the community
- Learn how communities in the United States are connected

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.

