

# PARENT CURRICULUM GUIDE

2023-2024 Lower Elementary Program (Grades 1 & 2)

# Lower Elementary at The Red Oaks School

The Red Oaks School Lower Elementary teachers are deeply committed to each student's academic potential while believing that students must also learn to collaborate successfully. Our classrooms provide age cohorts for academic subjects like math and literacy and multiage groupings for "specials" subjects. Offering varying social experiences helps foster the tools necessary for effective collaboration. Our Lower Elementary classrooms are alive with the buzz of learning and sharing. Students feel challenged at their instructional edge within a community that encourages them to practice cooperation, compromise, and communication.

The course of study draws from various current, researched educational resources. The Lower Elementary bases its reading and writing program on the Reading and Writing Workshop developed by Columbia Teachers College. In Mathematics, Singapore Math forms the basis of our math curriculum. The Next Generation Standards guide the Science program. Our Cultural Studies include geography and its effect on people's lives and the in-depth annual study of one country or continent. All students study Spanish and have a curriculum enriched with art, music, and physical education.

As in the Early Childhood classes, students engage in hands-on activities with concrete manipulatives whenever possible and always before approaching a structured written assignment. Students work independently, in small groups, and as a class, depending on the activity. We emphasize "talking about your thinking" to have children practice early metacognitive habits. Teachers are models, often thinking aloud or demonstrating concepts to "show" rather than "tell." Collaboration with other students is encouraged.

ROS teachers and administration consistently evaluate curricula to ensure it is practical, motivating, and consistent with the school's commitment to the "whole child," a phrase used to express Montessori's belief that education must address not only the student's academic needs but their social and physical needs as well.

The typical daily schedule provides focused, uninterrupted academic periods to enable students to delve deep into their studies and complete integrated projects that reflect their learning. Music, Art, World Languages, and Physical Education are also essential elements of the program.

# Specific Areas of Study:

# Language Arts

Language Arts at ROS includes comprehensive reading, writing, and spelling instruction. Teachers consistently assess formally and informally to ensure each student appears challenged appropriately. These assessments include reading assessments, comprehension checks, and scoring writing rubrics. Students work together in small groups and independently on daily work that reinforces necessary skills and on longer assignments that stem from discussions, exposure to a wide variety of literature, and integrated Science and Social Studies units of study.

#### Reading

Reading instruction in the Lower Elementary classroom is based on The Reading Workshop, developed by the Teachers College, Columbia University. The mission of this program is to help young children become avid and skilled readers and inquirers. This program relies on the research that children must read much at their "Just Right Level" to become proficient readers. The Reading Workshop is structured to allow students to read for 25-40 minutes each day, based on their grade level. The workshop follows a consistent structure whereby each daily session begins with a mini-lesson where the teacher models a reading strategy. Students then read independently, building on their stamina and using the skill introduced in the mini-lesson. The session concludes with a share to reinforce the reading strategy. The reading workshop aims to offer the readers a repertoire of comprehension and word study skills they can draw upon whenever they are reading to navigate the text successfully.

#### Writing

The Lower Elementary has also implemented the Writers' Workshop program developed by the Teachers College Reading and Writing Project. The teacher introduces the mini-lesson to teach strategies related to the particular writing unit explicitly. The mini-lessons end with the students writing independently. During this time, the teacher confers with the children and leads small group lessons with multiple opportunities for personalizing instruction. The workshop ends with share time, during which students can share their writing. The reading and writing workshop routines are simple and predictable so the teacher can focus on the complex manner of teaching responsively to accelerate achievement for all learners.

In addition to the Writing Workshop, teachers often assign prompts integrating Science and Social Studies topics to inspire confidence and ensure understanding. Teachers score students' pieces using consistent and thorough rubrics, and teachers conference individually with students to set goals and discuss progress. Teachers present small group lessons and assign intermittent activities that target areas where the rubrics evaluate descriptive language and elaboration, syntax, structure, and mechanics. Students keep portfolios of their scored pieces and subsequent work to show at parent conferences.

#### Spelling

For students to best express what they have learned, proficient spelling is a must. Each year, the expectations for conventional spellings increase. The ROS Lower Elementary spelling program utilizes *Explode the Code*, a phonetic approach that introduces phonetic constructs in isolation as students learn letter-sound relationships and how these relationships transfer to decoding and spelling unfamiliar words. *Explode The Code* is based on the Orton-Gillingham approach to reading, which supports multisensory, structured, sequential, cumulative, and flexible instruction. Explode The Code offers a complete systematic phonics program for the elementary grades. This program also includes instruction in high-frequency words that are not phonetically based. Teachers use formative and summative assessments to evaluate students' progress and design follow-up instruction.

## Math

Mathematics is hands-on and "heads in" at Red Oaks. The Math curriculum in the Lower Elementary serves as a bridge between concrete mathematical experiences using materials and complex abstract mathematical thinking. Students use manipulatives while working through a structured program based on a Singapore Math scope and sequence.

ROS has adopted the *Math in Focus* program, a Singapore math methodology highlighting visual strategies and critical thinking. Throughout the Lower Elementary program, students consistently go through a three-pronged approach to mathematics: *First*, students meet a concept with the most concrete material representations (typically Montessori materials). *Next*, students visualize the mathematical concept or entity, often through Singapore Math's bar modeling technique and with materials and activities that utilize a multisensory approach. *Finally*, students reach abstract applications where they work with algorithms and reinforce computation and problem-solving strategies.

Problem-solving is at the heart of the math curriculum; students work on word problems that require using the computational skill they are building at that time. Singapore math reinforces structures with a strategic approach to interpreting word problems by drawing bar models. The method involves a step-by-step approach that illustrates the problem to help students understand the problem and, in turn, strategize what is needed to solve the problem. Because the process is consistent, practice allows students to grow more independent at working through challenging problems. This type of traditional Singapore problem-solving enables students to be efficient when determining what method to employ when beginning problem-solving tasks and is unique to ROS.

The lower elementary teachers employ a variety of hands-on manipulatives; then, students abstract their understanding in their independent work. *Math in Focus* workbooks and activities encourage the practice and repetition that basic computational skills require. While the sequence of presented concepts is consistent, each student demonstrates understanding, and their progress is met with appropriately leveled materials, allowing students to remain challenged and inspired.



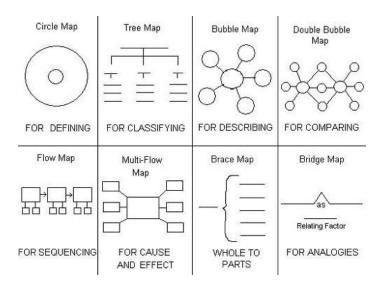
The following topics form the math curriculum sequence for the year.

Year One	Year Two
Numbers to 10	Place Value to 1,000
Addition & Subtraction to 10	Addition and Subtraction to 1000
Shapes and Patterns	Word Problems
Numbers to 20	Length Measurement: Metric & Standard
Addition & Subtraction to 20	Mass Measurement: Metric & Standard
Numbers to 40	Graphs & Line Plots
Calendar and Time	Multiplication & Division
Addition & Subtraction to 40	Multiplication Tables
Length & Weight	Time & Money
Numbers to 120	Shapes
Addition and Subtraction to 120	
Graphs	
Money	

# **Critical Thinking**

At Red Oaks, critical thinking is an academic subject in and of itself. ROS has adopted *Thinking Maps*, a graphics series that encourages and records thinking. The maps are consistent visual patterns linked directly to eight specific thought processes. By visualizing their thinking, students create concrete images of abstract thoughts. These patterns help all students reach higher levels of critical and creative thinking -- essential components of effective and current educational practice. School-wide implementation establishes a common language for learning

and sharing. Teachers model using maps across the curriculum and provide guided practice until student proficiency is reached. The maps are a daily part of classroom life.



### Science

The Lower Elementary science program at The Red Oaks School is adapted from Science and Technology for children, developed by the Smithsonian and National Science Foundation. In a two-year sequence, students engage in an interactive science program incorporating the Next Generation Science Standards (NGSS), including physical, life, and earth sciences. Reading, writing, and problem-solving activities are often closely connected to the science curriculum, capitalizing on the interdisciplinary nature of the school curriculum. The students learn to "talk science". Through a deep integration of jargon, the science classroom experience raises our student's attention and awareness of science, technology, and engineering practices. We consider our students to be "young scientists," by role-playing in this capacity, we increase our learners' neurological connection to the art of science.

As our students progress in our science program, they apply their understanding of the laws and concepts guiding science to solve problems. In our lower elementary grades, students develop their skills of pattern recognition and engage students to formulate answers to questions about the world around them. Our goal is to foster curiosity in our learners so they can confidently expand and deepen their science knowledge.

Field experiences will be integrated to bring the science curriculum to life and enrich and extend classroom experiences.

#### Unit 1 Space Science:

The *Space Science* unit has our learners discovering Earth's position in the universe relative to the sun, stars, and other celestial bodies. Our goal is for students to model the vast and infinite size/shape of the universe and the role gravity has on objects in space and on Earth. Throughout this unit of study, observations of the sun, moon, and stars will be used to describe patterns

that can be predicted. A moon survey and model will drive scientific discussion and lead our learners into personalized space missions.

#### Unit 2 Structures and Properties of Matter:

The *Structures and Properties of Matter* unit allows our learners to begin their exploration of chemistry. They can build their scientific language by using concrete materials to examine the states of matter. Students launch into making claims based on data and evidence to justify and extend their reasoning. After running multiple individual and group experiments, they will utilize science journaling techniques to explain and summarize their understanding.

#### Unit 3 Waves/Light/Sound

The *Waves / Light / Sound* Unit explores the relationship between vibrations and sound. Students begin to examine the cause-and-effect relationship between material types and the amount of light that can pass through different materials through interactive activities and demonstrations. Our learners evaluate how light and sound signals can form patterns that can be combined for communication. In a culminating assessment, students work together to compose a sound and light symposium to demonstrate how waves can have technological implications for transferring information.

## **Social Studies**

Strong Montessori Social Studies programs emphasize geography, history, and world cultures instruction. Red Oaks is no exception, but we go further. Students focus on studying a different continent each year, looking deeply at a specific country. The curriculum, researched and recorded by Red Oaks teachers, is intentionally interdisciplinary.

#### Community

Students will develop an understanding of themselves as members of classroom and school communities. They will recognize that being a community member allows us rights and responsibilities. Students will understand that the school is an institution and that the school and classrooms use rules and procedures to ensure a safe, orderly, and predictable environment.

Students will develop an understanding of citizenship through reading, writing, class projects, and class discussions. Using the school as a parallel, students will understand how government institutions make laws to help people be safe and get along. They will learn that each country has its own form of government and that cities, states, and national governments make laws for citizens to follow.

#### **Geography and Map Skills**

Students will learn how to use maps to find specific locations, countries, bodies of water, and landforms. Students will develop an understanding of different seasons and climates across

different regions of the earth. Students will examine how the different features of a region, including natural resources and land and water, affect communities' lifestyles and culture.

#### **Country Study**

In this unit, students will learn about a culture in another part of the world than their own. Students will explore differences and similarities between the country Peru and the USA. Students will explore the concept of culture and how families of Peruvian culture may have special customs and traditions. Students will examine the Peruvian landscape and climate and determine how families have adapted their lifestyles to meet their needs in that environment. Students will investigate types of communities in Peru and find similarities and differences between their people and environment compared to their own.

Students explore biomes, topography, and natural resources of the designated continent or country of study. They employ *Thinking Maps* as they explore teacher-previewed and prepared resources that shed light on where and how people live due to various geographical features. The unit continues with the history and culture of a country within a continent. Over the past few years, Red Oaks students have delved deeply into Asia (China, India, Pacific Rim), Europe, South America, Africa (South Africa, Ghana, Uganda, Nigeria), and North America.

Most units end with a "demonstration of learning" to other Lower Elementary students and parents. These demonstrations include original plays, oral presentations, musical performances, and the like.

In this year-long study of Peru, students will learn about Peru's vast, rich, and diverse culture. Our students will engage in an in-depth exploration of Peru's land, people, and culture. This interdisciplinary study will include literature, art, music, sports and dance, and hands-on experiences in the Red Oaks Makerspace. The study will conclude with the completion of an ongoing project that will reflect their learning and understanding of this fascinating country.

# World Language - Spanish

Spanish in Lower Elementary is based on the four Montessori integrated aspects of learning a language:

- **Listening:** The students build their vocabulary centered on themes: we learn about time and weather, school and class activities, shopping, and family life.
- **Speaking:** With the new vocabulary, the students are introduced to Spanish grammar: conjugation, pluralization of nouns and articles, noun and adjective agreement, and possessive adjectives. They are expected to participate and answer in full sentences.
- Writing: First-year students write sentences and reinforce vocabulary in their Alba y Gael workbook. Second-year students are also working on their Alba Y Gael workbook, and they are expected to create original full sentences in speaking and writing.
- Reading: Students have the opportunity to read during class.

Each lesson is divided into three parts:

- **Greeting song/conversation**: Students are greeted with a song and engage in conversation about the date, weather, and seasons.
- **Lesson**: Centered on different themes: home life, school activities, travel, etc. The vocabulary and the grammar are introduced at the same time.
- Activity Book: The Alba y Gael workbook encompasses the World-Readiness Standards for Learning Languages: communication, culture, connections, comparisons, and communities.

This year, our cultural study will be about Mexico. We will learn about this country through songs, food, cultural presentations, traditional stories, dance, and geography. Additionally, there will be a Spanish assembly in the spring highlighting what students have learned throughout the year.

### Art

\*Students will enjoy a performing arts program until our visual arts teacher returns from maternity leave. Arts educator, director, and choreographer Dawn Lau will train the students to grow comfortable with dramatic expression using improvisation techniques. As the students gain confidence, they memorize a song and dance to perform. The program offers unique methods of exercising a "growth mindset" by taking risks and stretching each student out of the "comfort zone!"

The visual art program at Red Oaks offers students opportunities to explore a broad range of art-making techniques while synthesizing craft and concepts. Students build their conceptual and historical understanding of visual culture by manipulating materials, observing, and engaging in ongoing discussions with their peers. These explorations in self-reflection and communication provide tools for students to see and respond to the world around them.

Through the fine arts program at Red Oaks, students participate in a rigorous study of the arts comprised of the following components:

- Art production: Involves critical thinking, imaginative processes, and the expression of the heart, mind, and hand. Students gain a sense of proficiency as they are introduced to various art processes. Each student is given the time and space to learn about tools and techniques and experiment and improvise.
- The History of Art and Visual Culture: An integrated approach to the investigation of visual culture includes the history and contemporary application of art, design, and craft. Students develop an authentic kinship with masters of the past and present by relating their creative process and explorations of concepts to the work of others.

The Lower Elementary Art Curriculum explores the Elements of Art and Principles of Design. Students study how each element can be transformed through art history, nature, and culture studies. Students examine famous artists' works and how they created their compositions. We dive into cultures globally, analyzing the art of diverse groups worldwide and the development of important techniques artists still practice today. Our ultimate goal is to produce a learning environment that allows students to feel safe to explore the world around them artistically, express themselves thoughtfully, and create works that inspire endlessly.

### Makerspace

At ROS Makerspace is not just a room, It's a community of young makers. Students from all grade levels come together to explore, create, and innovate. It's a place where imagination knows no limits and everyone is encouraged to embrace their inner inventor.

In our Makerspace, students have access to a treasure trove of materials and tools all carefully curated to support hands-on learning. Applying the 4 C's - Creativity, Critical thinking, Collaboration, and Communication students come together to create, invent, prototype, design, tinker, explore, discover, code, build, craft, draft, draw, and much more. Students work individually or collaboratively using low and high-tech tools and materials.

The objective of this program is to promote:

- **Creativity:** It encourages students to think outside the box, fostering creativity and innovation.
- Hands-on learning: It's a place where students learn by doing, applying classroom knowledge to real-world challenges.
- **Problem Solving:** Through trial and error students develop critical problem-solving skills as they tackle projects.
- **Collaboration:** Teamwork is the key in the maker space, promoting communication and cooperation among the students.
- Engagement: Learning is fun here! Students eagerly embrace projects that ignite their curiosity.
- Integration: Deep learning takes place through cross-curricular experiences. Instead of teaching students in isolated settings, we see the importance of integrating makerspace into their curriculum.

As students tinker they analyze what's working and what's not, and they have to try different tactics to solve problems. Through the *Engineering Design Process*, kids learn to define, ask, imagine, plan, prototype, test, and improve their experiments, accept failures, make improvements, and develop resilience. The Makerspace is interdisciplinary; its projects are an extension of the Social Studies, Science, and Math curriculum units. The design thinking

process helps students be involved in finding alternatives/solutions to real-life problems around us and will help prepare students for the Design program at the Middle School.

# Music

Music at ROS is both expressive and explorative. Students consider music from various sources to understand and foster respect for cultures extending far beyond their experiences. Simultaneously, students learn fundamental skills to develop confidence and creative spirits. Students' early musical experiences help to set the stage for the perseverance needed for later study and practice.

Three principles guide the music program at Red Oaks:

- Children respond intuitively to rhythm and melody.
- Musical sounds are created by musical actions upon an instrument.
- Musical concepts are discussed only after they have been experienced.

In the Lower Elementary music program, students will identify and explore the basic elements of music: rhythm, melody, harmony, and form. They will develop technical skills on pitched instruments, such as Orff xylophones, and non-pitched instruments, such as hand percussion. Through guided improvisation, students will learn about rhythm and melody. They will work with musical notation, allowing them to record their creations. Ensemble pieces will offer experiences in harmony while promoting teamwork. By creating "listening maps," students will chart the form of a musical piece and add structure to their improvisations. Throughout the year, lessons and activities will foster artistic literacy through the processes of creating, performing, responding, and connecting.

# **Physical Education**

The Red Oaks Physical Education curriculum is designed to help develop students' physical literacy. The International Physical Literacy Association (2017) describes physical literacy as "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life."

Given that physical literacy is a lifelong process, we endeavor to continue to develop further and refine the fundamental movement skills of our Lower Elementary students. These basic movement skills will be taught through various increasingly complex and challenging individual and group activities.

These basic movement skills include:

- Locomotor (walk, run, dodge, jump, hop, skip)
- Non-locomotor (land, rotate, balance)

• Manipulative (throw, catch, kick, strike with an implement)

These basic skills are not only fun but also teach the essential skills required as a foundation for more complex physical activities and sports. It is of utmost importance that all children develop a good base of these skills before puberty to optimize future performance and lifelong physical activity (City of Richmond, 2015).

Students will also begin to explore the underlying concepts involved in various sports, including offense and defense, positioning, and movement.

Our units of instruction for this school year are as follows:

- Locomotor movement skills
- Throwing and catching
- Movement Composition (Gymnastics & Dance)
- Striking and Dribbling

Embedded within these units of instruction are opportunities for Lower Elementary students to continue developing their teamwork, cooperation, communication, and problem-solving skills through various games and activities.