

# Fourth Grade... At A Glance



Empowering the Dragon community to achieve excellence.



#### **District Mission**

Empowering the Dragon community to achieve excellence.

# **District Vision**

Empowered Dragons experience joy and success.

#### **Belief Statements**

#### We believe that:

- Preparing Dragons is a collaboration of students, staff, families, and community.
- We have a responsibility to provide a safe, welcoming, equitable learning environment where all individuals are respected and valued.
- In fostering an environment that cultivates each individual's maximum potential.
- Character development is an integral part of education.
- In a dynamic innovative approach to educating Dragons.

This brochure contains the expectations for language arts, math, science, social studies, art, physical education, music, and media for each child in fourth grade. Separate brochures outline the expectation for other grades. The expectations are designed to ensure students receive sequenced instruction from grade to grade. These expectations are aligned with state and/or national standards.

The purpose of this brochure is to familiarize you with the concepts your child will be presented with throughout this school year. This information will allow you to work with your child's teacher to help provide the highest level of achievement. Use it when you talk with your child's teacher(s). Ask what you can do at home to support learning in the classroom and reinforce learning at home.

Lake Orion Community School teachers, administrators and support staff are committed to helping your child achieve their potential.

Lake Orion Community Schools does not discriminate on the basis of race, color, religion, sex, national origin, disability, marital status, height, weight or age. Board of Education policy forbids acts of illegal discrimination in all matters.



**Fourth Grade** is a year of working toward independence. Students are learning to become critical thinkers and active problem solvers in all areas of the curriculum. Values we encourage in our students are reinforced in our language arts units of study.

Our fourth-grade social studies curriculum focuses on the geographical regions and government of the United States. Students develop an understanding of economic principles and concepts. In science, our focus is always on student discovery. In each lesson, students act as scientists and/or engineers to make sense of their world and how it works. In fourth grade, they investigate energy, information transfer and wave properties, and our changing earth.

#### **English Language Arts**

# Literacy in Fourth Grade

Building the stamina and skills to read challenging fiction, nonfiction, and other materials is fundamental in fourth grade. Your child will continue to learn about the world as well as build vocabulary skills by reading more complicated literature from different cultures and a range of books on science, history, art, or music. Fourth grade students will also make important strides in their ability to explain their thoughts using details; both literal and inferential. In fourth grade, your child will be applying their newly learned writing skills across all curricular areas.

#### **Read Aloud with Discussion**

Students are read aloud to daily. During this valuable time, teachers verbally interact with the class. The process includes pre-reading, during reading, and post-reading conversations to enhance understanding and making connections with the story. The read aloud selections are often from a variety of genres – fiction, nonfiction, picture books or poetry. During this critical time of instruction, students see and hear what readers do so that they may apply this same process in their own reading.

#### **Reading Workshop**

Reading Workshop follows a predictable structure, fostering powerful learning. Each day, the teacher begins with a short lesson focusing on a skill or strategy that will benefit all students. Students self-select and read books that are at their independent reading levels. At this level, students can read almost all the words accurately, read with appropriate speed and expression and above all, understand the text. While students are reading, the teacher meets with small groups or with individual students in order to meet their academic needs. Creating readers who love reading is the heart of Reading Workshop.

#### Writing Workshop

The structures of Writing Workshop are similar to that of Reading Workshop. Fostering a love for writing, daily opportunities for practice, and maximum student choice are foundational in Writing Workshop classrooms. Your child will write narrative, informational, and persuasive pieces



reflective of his/her developmental interests and stage of writing development. Through individual meetings with the teacher, small group work, and assessment-based instruction, your child will be guided toward advancement of his/her writing skills. Students will publish and celebrate their many accomplishments throughout the year.

# **Word Study**

Word study teaches students to examine words. They will discover the regularities, patterns, and conventions of the English language in order to read, write, and spell. Students pass through developmental stages and participate in word or picture sorts and additional learning activities to meet their individual and small group needs.

# What Your Child Will be Working on in Fourth Grade

# Reading Standards for Literature and Informational Text

- Comparing ideas, characters, events, and settings in stories.
- Describing the basic elements of stories-such as characters, themes, events, and settings-by drawing on specific details in the text.
- Referring to details and examples in the text when explaining what the text says and what is implied.
- Summarizing informational/non-fiction text including the main idea and supporting details.
- Describing non-fiction and fiction text structures and genres.
- Compare and contrast points of view.
- Integrating multiple books on the same topics to become knowledgeable on a subject.
- Comparing firsthand and secondhand accounts of the same events.
- Interpreting text features and explain how they support understanding.
- Independently reading a fiction Level S text independently with fluency, accuracy, and comprehension.
- Independently reading grade level appropriate non-fiction text with fluency, accuracy, and comprehension.

# Language and Foundational Reading and Skills

- Using strategies to problem solve unfamiliar words.
- Using phonics (i.e. prefixes, derivational suffixes, Latin suffixes) and word analysis to figure out unfamiliar words.
- Using nouns, verbs, adjectives, adverbs, and prepositional phrases correctly when speaking and writing.
- Producing simple, compound and complex sentences recognizing run-ons and sentence fragments when writing or speaking.
- Correctly use frequently confused words (e.g. to, too, two; there or their).



- Gaining a command of punctuation when writing (i.e., commas in a compound sentence, quotation marks).
- Writing complete sentences with correct capitalization and spelling.
- Applying spelling patterns and spelling rules when writing words.
- Using resources to correct improper spelling.
- Determining the meaning of unknown words using a variety or strategy (i.e., context, Greek and Latin affixes and roots, glossaries, electronic dictionaries, thesaurus).
- Demonstrating understanding of word relationships and nuances in word meanings (i.e., similes, metaphors, idioms, proverbs, synonyms, antonyms, adages).
- Acquiring and using new vocabulary.

# **Writing Standards**

- Writing opinion pieces that present a point of view with reasons supported by facts, organized with related information grouped together, transition words to connect ideas, and a concluding statement related to the opinion presented.
- Writing information/explanatory texts that introduce a topic clearly, group related information into paragraphs or sections with careful attention paid to format, text features to support or enhance text details, quotes and definitions including specialized vocabulary, use transition words to connect ideas, and end with a concluding section or statement related to the information presented.
- Writing narrative stories (real or imaginary) that establish a situation, introduce a narrator or characters, contains events that unfold naturally, dialogue, description, transitions, sensory detail and provides a conclusion that follows the narrated events.
- Conducting short independent research projects on different aspects of a topic using evidence from books or the Internet.
- Using the writing process (pre-writing or rehearsing, drafting, writing, revising, editing, and publishing) to produce multiple finished products.
- Gathering relevant information from print and digital sources, taking notes and sorting information into categories, and providing a list of sources.

#### Speaking and Listening Standards

- Paraphrasing and responding to information presented in discussions such as comparing and contrasting ideas and analyzing evidence that speakers use to support particular points.
- Following rules for respectful discussion.
- Paraphrasing portions or a text presented using a diverse media format.
- Orally reporting on a topic or experience in an organized manner, with facts and details that support the main idea or theme.
- Adding audio recordings and visual displays to enhance the development of the main idea or theme of an oral presentation.



• Determining whether to use formal or informal speech based on the context or situation.

# **Mathematics**

Your student will explore, problem solve and build their thinking of mathematics using manipulatives, drawing representations, and solving abstract number problems. They will work cooperatively to discuss, and problem solve while showing evidence of their thinking.

# **Mathematical Practices**

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- 5. Use appropriate tools strategically.
- Attend to precision.
- 7. Look for and make use of structure.
- Look for and express regularity in repeated reasoning.



# **Operations and Algebraic Thinking**

- Interpret multiplication equations.
- Multiply or divide to solve word problems by using drawings and equations.
- Recognize factors and multiples.
- Determine whether a number is prime or composite.
- Generate a number pattern that follows a given rule.

#### Numbers and Operations in Base Ten

- Recognize a digit in one place is 10 times what it represents in the place to the right.
- Read, write, and compare multi-digit whole numbers.
- Round multi-digit whole numbers to any place.
- Add and subtract whole numbers up to 1 million.
- Multiply and divide multi-digit numbers.

# **Number and Operations - Fractions**

- Recognize and create equal fractions.
- Compare fractions with different numerators and different denominators.
- Add and subtract fractions with the same denominator.
- Build and decompose fractions from smaller fractions.
- Multiply fractions by whole numbers.
- Convert fractions into decimals with denominators of 10 or 100.
- Locate decimals on a number line.
- Compare fractions and decimals using symbols (<, >, and =).

#### Measurement and Data

- Convert measurements from larger to smaller units within one system.
- Apply formulas for area and perimeter for rectangles in real world problems.
- Represent and interpret data using a line plot.
- Measure angles and connect fractions to angle measurement within a circle.

#### Geometry

- Recognize and classify 2D shapes by their attributes.
- Understand perpendicular and parallel lines.
- Identify line-symmetric figures and draw lines of symmetry.

#### Science

All science units are aligned with the Michigan Science Standards. The Michigan Science Standards are really a set of student performance expectations. These performance expectations incorporate three main elements:





- **Disciplinary Core Ideas** (science specific concepts in the life, earth and space, and physical sciences).
- Science and Engineering Practices (asking questions and defining problems, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations and designing solutions, engaging in argument from evidence, and obtaining, evaluating, and communicating information).
- Crosscutting Concepts (Patterns, Cause and Effect, Scale, Proportion, and Quantity, Systems and System Models, Energy and Matter in Systems, Structure and Function, and Stability and Change of Systems).

# Earth and Space Science

#### Students will be able to:

- Explain with evidence how patterns of past natural hazards help scientists predict future occurrences.
- Predict how fossils reveal changes to the earth's surface.
- Observe and describe the patterns of the locations of mountain ranges, ocean trenches, volcanoes, earthquakes.
- Model the order in which rock layers were formed.
- Predict, observe, and model how water, ice, and wind break rocks during weathering and erosion.
- Demonstrate that earthquakes, volcanoes, and mountains occur at each boundary between continents and oceans.
- Design a structure that will withstand a natural disaster.

#### **Physical Science**

# Students will be able to:

- Use evidence to explain the relationship between the speed and energy of an object.
- Predict the result of the collision between objects.
- Observe the transfer of energy by sound, light, heat, and electric currents.
- Explain that energy and fuels are derived from natural resources and explain how their use affects the environment.
- Design, test, and refine a device that converts energy from one form to another.
- Describe amplitude and wavelength of waves.
- Model how waves can cause objects to move.
- Demonstrate how patterns are used to transmit information.

#### Life Science

Students will be able to:



- Construct an argument that plants, and animals have internal and external structures that help support survival.
- Use a model to describe that animals receive different types of information through their senses, process the information in their brain and respond to the information in different ways.

#### **Social Studies**

# Geography

- Use a variety of geographic tools to describe the regions of the United States.
- Understand how regions are created from common physical and human characteristics.
- Understand how human activities help shape the Earth's surface.
- Understand the effects of human environment interactions.
- Explain the factors that influence migration and immigration and the impact this has had on the development of diverse cultural regions of the United States.

#### **Civics and Government**

- Explain why people create governments.
- Understand the values and principles of American constitutional democracy.
- Describe the structure of the government of the United States and how it functions to serve citizens.
- Explain important rights and how, when, and where American citizens. demonstrate their responsibilities by participating in government.

#### **Economics**

- Use fundamental principles and concepts of economics to understand economic activity in a market economy.
- Use fundamental principles and concepts of economics to understand economic activity in the United States.
- Use fundamental principles and concepts of economics to understand economic activity in the global economy.

#### **Public Discourse, Decision Making and Citizen Involvement**

- Clearly state a problem as a public policy issue, analyze various perspectives and generate and evaluate possible alternative resolutions.
- Use examples from Michigan history as a case study for learning about United States geography, economy, and government.



#### **Visual Arts**

The visual arts curriculum is based on the National, Michigan, and Lake Orion standards and builds a foundation for creative thinking, problem solving, and lifelong learning in the arts and other disciplines. In art class, children learn to convey ideas, feelings, and emotions by creating their own images. They explore the historical and cultural messages wrapped up in works of art. They also reflect on the meaning of what they see in art. Students learn to express their opinions and show respect for their own ideas and creations and for those of others. They explore a variety of media techniques, and processes in the broad categories of painting, drawing, mixed media, and sculpture.

They also learn the safe use and care of art materials and tools. Looking at, thinking about, and making art are presented as enjoyable and integral parts of learning about art. Students develop a better understanding of beliefs and ideas that are different from their own.

At the fourth grade level, increased visual awareness is developed as students learn to identify subtle visual qualities in the environment and works of art. Students create more complex works of art and give greater attention to their expressive intentions. They use design concepts for specific purposes, such as color to express a mood and repetition to create visual rhythms. Efficient and inventive uses of media are emphasized to build skills and flexibility in creating works of art.

#### Media

The media curriculum, which is based on national standards, builds a foundation for future library and media center use, nurtures an interest in reading, and develops the skills for students to become life-long learners. Students visit the media center weekly as a class group. Additionally, they may visit independently or in small groups. A media specialist is available to instruct and assist students during their visits to the media center.

In order for the media program to be effective, information skills are taught in conjunction with subject area benchmarks. This requires cooperative planning between classroom teachers and media specialists.

At the fourth-grade level students:

- Access and evaluate information efficiently and effectively using an assortment of resources, including online databases as well as print material such as encyclopedias, almanacs, and atlases.
- Locate and identify a variety of potential sources of information, evaluate these sources, and follow copyright laws.
- Review the Dewey Decimal System as an organizational system.
- Are introduced to bibliographic form and understand the concept of plagiarism.
- Read, appreciate, and reflect on the literary excellence of award-winning books.



• Use locational skills, to select books from a variety of genres.

Fourth graders are encouraged to enjoy, value, and embrace books and reading.

# **Technology**

The Lake Orion Elementary Technology Curriculum is based on the Michigan Educational Technology Standards for Students (METS). These standards are embedded in the Lake Orion curriculum and are introduced, reinforced, or mastered by students throughout their elementary educational experience. Lake Orion educators use the technology standards as guidelines when integrating technology into the curriculum. To be effective, technology skills are taught in conjunction with subject area benchmarks in every discipline across the curriculum and result in a technologically literate individual. Media Specialists and classroom teachers work cooperatively to structure the learning environment and educate student in the tools of their time.

#### Music

The music curriculum is based on the National and Michigan standards and builds a foundation for creative thinking, problem solving, and lifelong learning in music and other disciplines. Music is a unique way of knowing the world. It is a vehicle for personal expression, common to all cultures, and a doorway into understanding cultural diversity.

The nature of musical learning is such that musical understanding is developed and assessed through listening, creating, and performing. Musical thinking supports and connects to other ways of thinking. It is fundamental to developing the whole learner. Musical learning provides students with the opportunity to experience the aesthetic value of music. Everyone has the ability, and therefore, the right to learn and understand music.

Participation in music education foster's ability, positive self-image, personal and group interaction, cooperative learning, personal growth and development, and a sense of accomplishment.

At fourth-grade level, students continue to explore the musical elements of harmony, articulation, form, and texture. They are introduced to style and affect and begin to explore different styles and genres and to understand how musical elements are used and combined to produce affective qualities in music. Students demonstrate understanding through listening, creating, and performing more complex melodies alone and as part of a group.



# **Physical Education**

The Physical Education program in Lake Orion is designed in accordance with the Michigan Benchmarks and Standards. Our curriculum provides students with the knowledge, skills, fitness, and attitudes necessary to lead a healthy lifestyle. Below you will find a brief overview of what your child will be exposed to during their K-5 career.

- Demonstrate appropriate form of walking, running, horizontal jumping, vertical jumping, skipping, hopping, galloping, sliding, and leaping.
- Demonstrate appropriate form of underhand throwing, overhand throwing, catching, hand dribbling, foot dribbling, kicking, and striking (batting).
- Demonstrate the ability to bend, stretch, rock, roll, curl, twist, turn, push, pull, swing, sway, and land.
- Demonstrate selected fundamental rhythmical skills i.e., clapping while walking.
- Demonstrate selected combinations of locomotor, object control, non-locomotor and body control, and rhythmical skills.
- Participate successfully in selected health-enhancing, lifelong physical activities and develop working knowledge of the effects of physical activity on the body.
- Develop and maintain healthy levels of cardiorespiratory endurance.
- Develop and maintain healthy levels of muscular strength and endurance.
- Develop and maintain healthy levels of flexibility of selected joints of the body.
- Develop and maintain healthy levels of body compositions.
- Apply the concepts of body awareness, time, space, direction, and force to movement.
- Explain and apply the essential steps in learning motor skills.
- Apply appropriate rules and strategies when participating in physical activities.
- Describe the effects of activity and inactivity and formulate examples of lifestyle choices that result in the development and maintenance of health-related fitness.
- Demonstrate appropriate behavior related to selected personal/social character traits that commonly emerge in a physical activity context.
- Value physical activity and its contribution to lifelong health and wellbeing.

# **Social Emotional Learning (SEL)**

The social emotional learning is based on the CASEL framework. Social and emotional learning is an integral part of education and human development. Students are exposed to CASEL's core competence areas:

- Self-awareness
- Self-management
- Social awareness
- Relationship skills
- Responsible decision making

