



# VALLEY STREAM 13 SCHOOL DISTRICT

## Family Guide to 4th Grade

October 2022

### **ENGLISH LANGUAGE ARTS : WONDERS**

Our English Language Arts curriculum emphasizes the connection between reading, writing, listening and speaking.

### **Reading Readiness**

In 4th Grade, students will develop the following skills:

- Locate and refer to relevant details and evidence when explaining what a text say and make logical inferences
- Determine a theme or central idea and explain how it is supported by key details
- Summarize a text
- Identify and analyze structural elements in literary texts
- Compare and contrast point of view from which different stories are narrated in a literary text
- Learn the difference between first and third person narrations
- Explain how claims in a text are supported by relevant reasons and evidence
- Recognize genres and make connections to other texts, ideas and cultural perspectives
- Read texts with sufficient accuracy and fluency to support comprehension
- Decode multisyllabic words

## Writing Readiness

In 4th Grade, students will develop the following skills:

- Write an argument to support a claim, using clear reasons and relevant evidence
- Write an informational text to explore a topic and convey ideas and information relevant to the subject
  - Introduce and develop a topic
  - Use content-specific vocabulary
  - Use linking words and phrases
  - Provide a concluding statement
- Write narratives to develop real or imagined experiences
  - Use dialogue and descriptions of actions, thoughts and feelings to develop experiences
  - Use concrete words and phrases to signal event order
  - Provide a conclusion that follows from the narrated experiences
  - Draw evidence from literary or informational texts to respond and support analysis and reflection
- Create a poem, response to a text, theme or personal experience
- Conduct research to answer questions

## Speaking and Listening Readiness

In 4th Grade, students will develop the following skills:

- Participate in a range of collaborative discussions
- Ask and answer questions in order to evaluate a speaker's point of view
- Paraphrase portions of information presented in diverse formats
- Report on a topic or text
- Include digital media in presentations

## Mathematics: Math in Focus

In Grade 4, students focus on three key areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; and (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

### **Number and Operations in Base Ten Strand**

- Generalize an understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place.
- Apply an understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations and develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers.
- Select and accurately apply appropriate methods to estimate or mentally calculate products, depending on the numbers and the context.
- Develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems.
- Apply an understanding of models for division, place value, properties of operations, and the relationship of division to multiplication.
- Develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends.
- Select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.

### **Numbers and Operations—Fractions Strand:**

- Develop understanding of fraction equivalence and operations with fractions.
- Recognize that two different fractions can be equal (e.g.,  $15/9 = 5/3$ ), and develop methods for generating and recognizing equivalent fractions.

- Extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.

### **Geometry Strand**

- Deepen an understanding of properties of two-dimensional shapes (e.g., angles, parallelism, and symmetry).

### **Required Fluencies in Grade 4**

- Add/subtract within 1,000,000

### **Mathematical Practices**

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

## **Science: Inspire Science**

Inspire Science allows students to investigate, problem solve, and discuss scientific practices. It is designed using the 5E Instructional Framework, which includes engage, explore, explain, elaborate and evaluate.

### **Topics of exploration in Fourth Grade include:**

#### *Energy & Motion*

- How are energy and speed related?
- What happens when objects collide?

#### *Transfer of Energy*

- How is energy transferred?
- How do electric currents transfer energy?

#### *Structures and Functions of Living Things*

- How do plant structures help them survive and reproduce?
- How do animal structures help them survive?

### Patterns of Earth's Changing Features

- How do living and nonliving things change Earth's surface?

### Natural Hazards

- How are people affected by earthquakes and volcanoes?

## **Social Studies: PNW Boces**

In fourth grade, students study "New York State History and Government." There are four units of study—The Three Worlds Meet in New York State, The Impact of the Colonial and Revolutionary Period on NYS, National and Local Government, and Change Comes to New York State. These units are interdisciplinary to include English Language Arts and Literacy skills and include a focus on New York State and the local communities. Students learn about the State's history from before the European colonial era to the modern period.

### **Fourth Grade Enduring Understandings Include:**

- New York State provided an ideal geographic setting for Native Americans, Europeans, and Africans to develop unique cultures and diverse social, political, and economic interactions.
- Colonial attitudes about government led to a call and battle for independence from European control.
- The National and New York State government share many common goals and powers but also reserve some powers of their own.
- Geographic, technological, and human factors contributed to NY becoming a leading commercial center.
- Diverse groups in NY have led calls for economic equality and social justice.
- The way Americans travel and communicate has changed because of innovative New Yorkers.

## **Health: The Great Body Shop**

Female students in grade four watch a video and participate in a Q&A with the school nurse about puberty and menstruation. Parents are given the opportunity to view the puberty and menstruation video as well as get a preview of the HIV/AIDS and human maturation unit at Wellness Night

The health education curriculum is aligned to the National Health Education Standards. Every month students receive Student Issues which look like magazine.

### *Injury Prevention & Personal Safety*

- Safety hazards
- Things that hurt your body
- Common sense
- Taking responsibility
- Dangerous vs. harmless
- Making safe decisions
- Types of abuse
- Right to privacy
- Sharing with a trusted adult
- Predicting consequences
- Practicing refusal and communication skills
- Internet safety

### *Nutrition*

- Digestive process
- Calories
- Energy and nutrients
- Responsibility for eating and exercise
- Meal planning
- Aesthetic and sensory preferences
- Refusal skills
- Eating disorders
- Food groups
- Influences on food choices
- Nutritional goal setting

### *Functions of the Body*

- About the heart, lungs, bones, muscles, digestion, endocrine and immune systems
- Teeth and dental care
- Oral health
- Mouth structure

- Dental products
- Dental professionals
- Function and care of the ear
- Responsible care of the body
- Hearing problems
- Disability awareness
- Different forms of communication

### *Growth and Development/Cycle of Family Life*

- Hormones and body changes
- Meaning of growing up physically and emotionally
- Managing strong emotions
- Practicing good hygiene
- Setting goals
- Value of keeping clean
- Personal strengths and challenges
- Decision-making
- Cosmetics and hygiene products
- Role of Growth and Development/Cycle of Family Life in growth and development
- Awareness of external support systems

### *Disease & Illness Prevention*

- Brain disorders
- Hygiene routines for illness prevention
- Relationship between disease and health choices
- Diseases associated with blood
- Immunization
- Effects of HIV on the immune system
- Setting goals
- Refusal skills
- Care of chronically ill
- Respiratory disease
- Empathy

### *Substance Abuse Prevention*

- Effects of smoking

- Difficulty of changing habits
- Addictions: physical and psychological
- Advertising and other influences on behavior
- Second-hand smoke
- Identify drugs and effects on the body
- Value of being drug-free
- Drug/HIV link
- Refusal skills
- Finding resources for help
- Developmental assets

### *Community Health and Safety (Violence Prevention)*

- Effects of smoking
- Difficulty of changing habits
- Addictions: physical and psychological
- Advertising and other influences on behavior
- Second-hand smoke
- Identify drugs and effects on the body
- Value of being drug-free
- Drug/HIV link
- Refusal skills
- Finding resources for help
- Developmental assets

### *Self Worth, Mental and Emotional Health*

- Media, peer, and behavioral influences
- Grief and loss
- Emotions
- Body image and health habits
- Respect for self and others
- Communication skills
- Goal setting
- Social, emotional learning skills
- Making healthful decisions
- Developmental assets
- Understanding points of view
- Character development (kindness, patience)

## *Environmental and Consumer Health*

- Reducing noise
- pollution
- Health care professionals and their services
- Food, hygiene, and cosmetic products
- Product labels
- Buying habits
- Second-hand smoke
- Advocating for personal, family, and community health

## *Physical Fitness*

- Exercise and muscles
- Defining physical fitness
- Benefits of exercise
- Practicing various forms of exercise and Injury Prevention & Personal Safety avoidance routines
- Setting goals for exercise and fitness
- Relationship between exercise and physical fitness
- Self worth and stress reduction
- Types of physical activities
- Fitness pyramid

## **Social, Emotional, Learning:**

### **RULER Program and Responsive Classroom**

Valley Stream UFSD 13 has adopted the RULER philosophy, which is an evidence-based approach for social emotional learning. RULER—which is an acronym that stands for Recognizing, Understanding, Labeling, Expressing and Regulating emotions—helps students to identify their feelings using a mood meter and work together to build a positive culture and climate in classrooms. RULER provides students with tools that help them deal with challenging feelings by reacting in less impulsive ways. Teachers incorporate aspects of RULER into their daily lessons to help support students' abilities to integrate thinking, feeling, and behaving in a fashion that promotes healthy outcomes.

In addition, Valley Stream UFSD 13 has implemented Responsive Classroom. The Responsive Classroom approach to teaching and learning fosters safe,

challenging, and joyful learning environments. This approach consists of practical strategies that bring together academic and social-emotional learning throughout the day. It allows children to reach their full potential by involving them in decisions about curriculum, classroom organization, classroom management, and discipline.

## **SPECIALS**

In fourth grade, students will attend Art, Music and Library once a week and Physical Education twice a week.

### **Physical Education:**

- Locomotor skills and assessment (running, skipping, jumping, hopping, galloping and leaping)
- Spatial awareness and safety
- Fitness
- Visual motor coordination/bilateral integration
- Gross motor skills
- Developmental sports skills
- Cooperative partner and small group activities
- Health concepts

### **LIBRARY:**

Students will be introduced to a widening array of authors, illustrators, fiction genres, folklore, biography, nonfiction, award winning materials; and continue to explore poetic forms and formats. Students will note the differences in genres of fiction: realistic fiction, fantasy fiction, historical fiction, mystery, science fiction, and literary nonfiction. Students will identify and distinguish the features of nonfiction: captions, diagrams, table of contents, index, glossary, bibliography, timelines, and advanced online databases. Students will identify and understand the role of literary elements with greater detail: character, setting, plot, theme, problem, and resolution. Students will understand the dynamics of a variety of print and nonprint resources including magazines, online encyclopedias, and other reference sources. Students will review as needed parts of a book with additions of introduction, preface, additional resources (bibliography) etc. Students will select and respond to literature with creative expressions of ideas in varied formats and genres to develop a love of reading. Students will locate materials and understand the arrangement of a library including all books in all genres and formats (print and ebook). Students will demonstrate comprehension skills in analysis of literary features, including author's purpose, point-of-view, and style. Students will demonstrate understanding of active listening behaviors,

proper book care and responsibility for returning materials on time. Students will demonstrate deeper understanding of digital citizenship and cyber skills, including respect for copyright, and avoiding plagiarism.

### **Art:**

Fourth graders will use critical thinking skills while observing, classifying, and describing art. Students will continue to be aware of other cultures and their works of art. They will use tools to manipulate artwork and apply critical thinking when describing artwork.

Students will develop the following skills:

- Brainstorm ideas for artwork using multiple approaches
- Set goals and create artwork that has meaning and purpose
- Explore art historical and invent artmaking techniques and approaches
- Expand previous knowledge of: 2-D and 3-D design skills
- Use color characteristics: hue, tint, shade, intensity.
- Identify complementary colors and use color theory to make artistic decisions.

### **Innovation Lab:**

Each building boasts an Innovation Lab with a district-developed curriculum as well as supplemental activities for single-day visits to the lab. The district-developed curriculum allows students to spend four days in the lab, allowing them to discover, design, create, and build. Our K-1 students follow hands-on STEAM learning that align to their science curriculum, such as making instruments, while our 2nd-6th grade students investigate, build and code using LEGO WeDo. Activities for single day visits include using KEVA planks, Bee Bots for coding, 3D doodler pens, and LEGO train.

### **Fourth Grade S.T.E.A.M. Push-in Program “Cars for Kids”**

Every Fourth Grade class in Valley Stream School District # 13 takes part in our S.T.E.A.M. Enrichment Program: “Cars for Kids.” The children work in teams to “purchase” materials to build “K’nex Cars.” Each team has a budget and each part has a price. The children have to follow the Engineering Process so that their cars meet the given criteria including (Weight, length, width and finding the center of gravity). Each “purchase order” must be complete in order for the children to obtain their parts. This even includes sales tax and shipping and handling fees. There are three tasks or goals that each car

must meet. (Greatest distance, accuracy and braking). The children compete against the other teams in their class and the entire school. This program serves two schools at a time for half of the school year.

### **Crossroads Farm:**

Valley Stream 13 has an ongoing partnership with the Crossroads Farm located in Malverne, NY. Crossroads Farm is an organic farm that is committed to the farm- to- table movement and farm-based education. The project starts with an in house trip to each school, where fourth grade students discuss the process of soil blocking and planting seeds. Students planted seeds in a soil block as well as in a cell platform. The students will measure the growth of the plants in both settings and see which one is best. This experiment will be done in the classroom. The next stage of the project will take place at the actual farm. Students tour the farm and learn about the animals, including the life cycle of honeybees. Students return to the farm in June to eat crops and enjoy the feast!