

Elementary School Specials

Our specials are a large part of our program where important standards-based concepts are taught while supporting project work whenever possible. Here is an overview of what we teach in each grade:

1. **Spanish:** As participants in a multicultural city the children have Spanish language instruction for 30-45 minutes 4-5 times a week. We offer some longer classes for the upper grades. We teach the children through conversation, storytelling, music and games. They learn how to communicate basic concepts and develop a cultural understanding of Spanish-speaking countries first verbally and then in writing. They use Spanish over other areas of curriculum, such as literacy, when they begin to read books in Spanish.

Kindergarten: The children focus on the sounds of the Spanish language and experience hearing and speaking those sounds. They listen to, observe, and practice sounds and sound blends through songs, games, stories, and art experiences. Students will communicate using memorized words and phrases to talk about familiar topics related to home, school, and the community.

Communication:

- Learn basic concepts, such as greetings, introductions, colors, and numbers.
- Connect information taught in Spanish relating to personal experience.
- Participate, applying a variety of techniques, such as recall/repeat and respond/extend.
- Develop the confidence to take risks.

Culture Studies:

• Develop a cultural awareness of Spanish-speaking countries, focusing on the Tropical Rain Forest. *Grammar:*

- Exposure to appropriate subject pronouns.
- Exposure to proper word order.
- Exposure and recognition of gender and number of nouns.
- Exposure to the appropriate use of adjectives in agreement with nouns in gender and number
- adjectives.
- Exposure to the five question words: who? what? when? where? why?
- Exposure to the use of punctuation and accent marks.
- Exposure to the use of articles (definite and indefinite).
- Exposure to basic verbs.
- Exposure to the difference between "ser" and "estar."
- Ask and respond to preference questions (Me gusta/No me gusta).
- Exposure to the use of "hay."

First Grade: The students continue to practice hearing and speaking Spanish, and also practice reading and writing Spanish vocabulary. This work reinforces recognition and recollection as they continue to play games, sing songs, and utilize puzzles and toys now labeled in Spanish. Students review and practice vocabulary from kindergarten and they learn to read and write words/sentences that they have learned at the end of each unit. Students will communicate using memorized words and phrases to talk about familiar topics related to home, school, and the community.

Communication:

- Review basic concepts taught in Kindergarten.
- Learn additional basic concepts (likes/dislikes, feelings).
- Connect information taught in Spanish relating to personal experience.
- Participate, applying a variety of techniques, such as recall/repeat and respond/extend.
- Develop the confidence to take risks.

Culture Studies:

• Develop a cultural awareness of Spanish-speaking countries, focusing on Mexico.

Grammar:

- Introduction to appropriate subject pronouns.
- Exposure to proper word order.
- Introduction and recognition of gender and number of nouns.

• Introduction to the appropriate use of adjectives in agreement with nouns in gender and number adjectives.

- Introduction to the five question words: who? what? when? where? why?
- Introduction to the use of punctuation and accent marks.
- Exposure to the use of articles (definite and indefinite).
- Exposure to basic verbs.
- Exposure to the difference between "ser" and "estar."
- Ask and respond to preference questions (Me gusta/No me gusta).
- Exposure to the use of "hay."

Second Grade: Second graders continue to practice hearing and speaking Spanish by developing role-plays to act out with their peers. The children delve more deeply into reading activities, pronouncing words by using their knowledge of the alphabet and associated sounds. Written work that aims to reinforce their experiences with the Spanish language continues, using word card collections, and expand into writing short sentences. Students will communicate using memorized words and phrases to talk about familiar topics related to home, school, and the community. *Communication:*

- Communicate in Spanish on diverse topics with classmates and school community.
- Connect information taught in Spanish relating to personal experience.
- Participate, applying a variety of techniques: recall/repeat and respond/extend.
- Develop the confidence to take risks.

Cultural Studies:

• Develop a cultural awareness of various linguistic and cultural practices of Spanish-speaking countries, focusing on the Caribbean

Grammar:

- Introduction to appropriate subject pronouns.
- Exposure to proper word order.
- Introduction and recognition of gender and number of nouns.
- Introduction to the appropriate use of adjectives in agreement with nouns in gender and number adjectives.
- Introduction to the five question words: who? what? when? where? why?
- Introduction to the use of punctuation and accent marks.
- Introduction to the use of articles (definite and indefinite).
- Exposure and introduction to basic verbs.
- Exposure to the difference between "ser" and "estar."
- Ask and respond to preference questions (Me gusta/No me gusta).
- Exposure to the use of "hay."

Third Grade: The children continue hearing, speaking, reading, and writing Spanish. Their writing starts to include simple phrases and beginning sentences.

Communication:

- Communicate spontaneously and comfortably in Spanish with classmates, school community and visitors.
- Connect information taught in Spanish relating to personal experience.
- Express feelings, likes/dislikes, sharing anecdotes.
- Develop analytic techniques of new information by understanding the use of gendered articles, plural/singular, basic verbs, basic sentence construction.
- Participate, applying a variety of techniques: recall/repeat and respond/extend.
- Develop the confidence to take risks.

Cultural Studies:

• Develop an awareness of cultural, geographical and diverse characteristics of the Caribbean as well as various Latin-American cities.

Grammar:

- Review of appropriate subject pronouns.
- Introduction to proper word order.
- Introduction and recognition of gender and number of nouns.
- Introduction to the appropriate use of adjectives in agreement with nouns in gender and number adjectives.
- Introduction to the five question words: who? what? when? where? why?
- Review of the correct use of punctuation and accent marks.
- Introduction and review of the correct use of articles (definite and indefinite).
- Exposure and introduction to basic verbs.
- Exposure to the difference between "ser" and "estar."
- Ask and respond to preference questions (Me gusta/No me gusta).
- Exposure to the use of "hay."

Fourth Grade: In Fourth Grade, they begin to compose narratives in Spanish, putting together sentences and telling stories. Students communicate using words, lists, and simple sentences to ask/answer questions, to handle simple transactions related to everyday life, and to talk about subject matter studied in other classes. *Communication:*

- Communicate spontaneously and comfortably in Spanish with classmates, school community and visitors.
- Connect information taught in Spanish relating to personal experience plus connecting new information to previous knowledge.
- Develop analytic techniques of new information by understanding the use of gendered articles, plural/singular, basic verbs and tenses, sentence construction.
- Participate, applying a variety of techniques: recall/repeat and respond/extend.
- Develop the confidence to take risks.
- **Cultural Studies:**
 - Develop an awareness of cultural, geographical and diverse characteristics of the Caribbean, and various Latin-American cities.
 - Introduction to the History of Spanish language.
 - Study various linguistic and cultural practices of Spanish-speaking countries.

Grammar:

- Identify and utilize appropriate subject pronouns.
- Exposure to the difference between "tú" and "usted."
- Review of proper word order.
- Recognize and identify the gender and number of nouns.
- Recognize that adjectives agree with nouns in gender and number; appropriately use
- adjectives (adjective agreement).
- Identify and correctly use the five question words.
- Correctly use punctuation and accent marks.
- Recognize and correctly use articles (definite and indefinite).
- Demonstrate an understanding of basic verbs.
- Understand the difference between "ser" and "estar."
- Recognize that there are different verb conjugations (present tense only).
- Ask and respond to preference questions (Me gusta/No me gusta).
- Review of the use of "hay."

Fifth Grade: Fifth graders continue to learn vocabulary and basic grammatical structures through an interaction with music, science, and art. Students communicate using words, lists, and simple sentences to ask and answer questions, to handle simple transactions related to everyday life, and to talk about subject matter studied in other classes.

Communication:

- Communicate spontaneously and comfortably in Spanish with classmates, school community and visitors.
- Connect information taught in Spanish relating to personal experience plus connecting new information to previous knowledge.
- Develop analytic techniques of new information by continue to develop the use of gendered articles, plural/singular, basic verbs and tenses,
- sentence construction.
- Participate, applying a variety of techniques: recall/repeat and respond/extend.

• Develop the confidence to take risks.

Cultural Studies:

- Develop an awareness of cultural, geographical and diverse characteristics of various Latin-American cities.
- Understand the history of Spanish language through various linguistic and cultural practices of Spanish-speaking countries.
- Get an introduction to Al Andalus.

Grammar:

- Identify and utilize appropriate subject pronouns.
- Exposure to the difference between "tú" and "usted."
- Review of proper word order.
- Recognize and identify the gender and number of nouns.
- Recognize that adjectives agree with nouns in gender and number; appropriately use
- adjectives (adjective agreement).
- Identify and correctly use the five question words.
- Correctly use punctuation and accent marks.
- Recognize and correctly use articles (definite and indefinite).
- Demonstrate an understanding of basic verbs.
- Understand the difference between "ser" and "estar."
- Recognize that there are different verb conjugations (present tense, simple past, and simple future).
- Exposure to complex verb tenses.
- Ask and respond to preference questions (Me gusta/No me gusta).
- Introduction to the use of "hay."

2. Creative Making: We want to provide students with hands-on experience with the tools, concepts and challenges of art making and woodworking. We emphasize creative thinking and problem-solving to foster self expression and to introduce students to engineering concepts. Through an emphasis on woodworking, tinkering, arts and crafts, Creative Making is an open-ended STEAM class for experimentation, making and inventing. This will be a place for exploration, demystifying the underlying principles of "how things work" and how to conceptualize ideas and see them through to completion. Through guided exercises, challenges and play, students will learn to use a variety of tools and techniques. Using paper, wood, crafts, art and woodshop tools and techniques, we will empower and encourage students to become independent makers who can face creative challenges through planning and experimentation while developing an understanding of the physical world and the possibilities offered by hands-on crafting, creative expression and engineering. We are lucky to have two studio spaces dedicated to Creative Making (Art Studio and the Woodshop). Both spaces will be utilized during the school year. Projects will deliberately integrate skills and techniques from both spaces in order to support students' creativity. Safety and stewardship of the spaces will be emphasized students will develop independence in these spaces—selecting appropriate tools and techniques to bring their ideas to life.

Kindergarten:

Concepts and Skills:

- Woodworking skills
- Proper tool-use and purpose, be it a hammer or a brush
- Woodshop safety
- Art studio stewardship
- Measuring
- Project planning and order of operations with blueprints and preliminary sketches at the start
- Larger-scale group projects that will involve collaboration and team planning with an emphasis on the variety of creative responses to a task and the role of creative making in self expression

Artist Focus: These artists are chosen as a focus to anchor the work around collage, assemblage and construction.

- Romare Breaden
- Pablo Picasso
- Louise Nevelson

First Grade:

Concepts & Skills:

- More complex problem-solving skills using woodworking tools and techniques
- Further independence in planning and selecting different art, woodshop tools and techniques to bring their visions to life.
- Project planning in woodshop and art.

- More complex blueprint creation, including building plans, cut sheets, and preliminary sketches.
- Further independence in tool and material selection— selecting the right tool for the task.
- Measurement: using tape measures, rulers and squares as well as developing project-specific methods of measuring to create more accurate deliberate designs. "Modus", base unit and proportion introduced.
- Hardware: hinges, casters, brackets, etc as complementary tools that expand the possibilities of woodworking.
- Sculptural techniques to include clay, wood, wire and papier-mache.
- Observation and representation: close observation explored through still lifes and portraiture.
- Line, light and shadow. Through close observation students will explore different ways of representing the world.

Artist Focus: These artists are chosen as a focus to anchor the work around still life, light and shadow, miniatures and scale models.

- Claes Oldenburg
- Henri Matisse
- Alexander Calder

Second Grade:

Concepts & Skills:

- Greater accuracy in all aspects of woodshop (marking, cutting, construction) and more complex mixed media explorations.
- Making of complex multi-part plans, including design blueprint, cut-sheet, different views, etc.
- Measuring using tape measure, rulers and squares.
- Understanding projects as a complex system with multiple parts and how each part is important. How when a part of a system is missing it may not work as planned.
- Larger scale work, taking into consideration the structural needs of larger constructions.
- Observational studies both in sculpture and in 2D media. Focusing observation in still lifes and portraiture.
- Students will reflect on the role of art and artistic expression in their own lives and in society, considering the uniqueness of their voice as artists and makers.

Artist Focus: These artists are chosen as a focus to anchor the work around portraiture, caricature, still life, color theory and naturalism.

- Nikki de Saint Phalle
- Robert Rauschenberg
- Vincent Van Gogh

Third Grade:

Concepts & Skills:

- Students will develop greater facility with measuring. Use measuring in both planning as well as building. Students will explore different methods of developing a project—using written plans and sketches students will create multi-stage projects.
- Consider how woodshop skill and techniques extend beyond the woodshop. Recognize and consider construction and creativity in the objects around us and in the built environment.
- Using painting, drawing and collage students will explore representation and narrative through image making. Students will build on observational skill and images drawn from the imagination in both 2D design as well as sculpture using class and mold making.
- Students will consider how art appears in the world and what its role in in their lives and in their community.
- Students will refine their woodshop skills, introducing more complex joinery.
- Students will develop observational skills and explore scale and proportion in image making and design.

Artist Focus: These artists are chosen as a focus to anchor the work around comics, proportion, scale, cast and molds.

- August Rodin
- Odilon Redon
- William Blake

Fourth Grade:

Concepts & Skills:

- Students develop full independence in the woodshop and art studio, becoming responsible for all aspects of studio operation—from set up (safety gear, etc) to material and tool selection, through cleanup.
- Students develop more complex woodworking skills. Students will learn about and how to make mechanical joints (simple dowel joints, rabbets, 45°, mortise-and-tenon) and simple kinetic elements (levers, hinges, pulleys, etc.).
- Measuring and planning skills deepened— make more complex plans including multiple views, floor plans/aerial views, elevations, cross-section and cut-sheets.
- Sculptural techniques will include frame and skin construction.
- Design techniques will introduce time-based media such as animation, video and theater.

Artist Focus: These artists are chosen as a focus to anchor the work around frame, skin, simple machines, kinetic sculpture, animation, photography and film.

- Jean Tinguley
- Rube Goldberg
- Isamo Noguchi
- Konstantin Brancussi

Fifth Grade:

Concepts & Skills:

- Students continue to develop full independence in the woodshop and art studio, becoming responsible for all aspects of studio operation—from set up (safety gear, etc) to material and tool selection, through cleanup.
- Students develop greater independence in directing projects. Learning how to plan and present their own projects as well as collaborating with others to create large scale projects and performances.
- Students will explore abstraction and representation as tools to express their creativity and ideas. Along with smaller individual project exploring a variety of art and construction techniques, students will work towards making a class film and will be responsible for all aspects of the production—from planning, prop making, music, script and filming. Introduce ideas of rehearsal, editing and collaborating on a larger project taking on different roles in a production.

Artist Focus: These artists are chosen as a focus to anchor the work around props, models, sets, film, performance, script, storyboard and score.

- George Melies
- Vassily Kandinsky
- Alexander Calder
- Mike Kelly

3. Music: The children receive music instruction twice a week, where they learn to sing folk, contemporary, and classic songs and participate in movement, rhythm, and instrument activities. As they get older and gain more musical confidence in their musical abilities, they will start to create their own compositions. Kindergarten through Fifth Grade participates in whole-school sings twice a year, cultivating a natural comfort performing in front of others. Beginning in Third Grade, recorder instruction starts. Chorus is offered to Third, Fourth and Fifth grades and meets weekly. They focus on improving vocal skills, singing 2-3 part music, and performing as an ensemble.

Kindergarten: *Kindergarten will start to learn about different elements of music and experience them through contemporary and folk songs, finger plays, dances, listening activities, books, song tales, and creating their own ideas about music and compositions. They will also learn music supporting their class projects throughout the year.*

- Vocal Exploration: 4 Voices: singing, speaking, shouting, whispering, matching pitch, and melodic contour.
- Music Comparatives: High/Low, Fast/Slow, Loud/Soft, Short/Long, Same/different, Smooth/Jerky, etc.
- Rhythm: Steady Beat and Beat vs. Rhythm.
- Creative: Organizing sounds, composing simple melodies and rhythms, improvisation with rhythms and melodies.

First Grade: First Graders will start to identify and label different elements of music and experience them through contemporary and folk songs, finger plays, dances, listening activities, books, song tales, and creating their own ideas about music and compositions. They will learn music supporting their class projects throughout the year.

- Vocal Exploration 4 Voices: singing, speaking, shouting, whispering, matching pitch, and melodic contour.
- Music Comparatives: High/Low, Fast/Slow, Loud/Soft, Short/Long, Same/different, Smooth/Jerky, etc.
- Melody: Identifying and reading sol, mi, and la.
- Rhythm: Identify the Steady Beat, Identify rhythms ta, ti-ti, and rest.
- Creative: Organizing sounds, composing melodies and rhythms, improvisation with rhythms and melodies.
- Musical Elements: two beat meter, measure, bar line, double bar line, repeat sign, and song form.

Second Grade: Second Graders will review first grade concepts and identify and label different elements of music and experience them through contemporary and folk songs, dances, listening activities, books, song tales, and creating their own ideas about music and compositions. They will also learn music supporting their class projects throughout the year.

- Vocal Exploration: Matching pitch and melodic contour.
- Melody: Identifying and reading sol, mi, la, re, and do.
- Rhythm: Identify the Steady Beat, Identify rhythms ta, ti-ti, rest and the half note.
- Creative: Organizing sounds, composing melodies and rhythms, improvisation with rhythms and melodies.
- Musical Elements: Four beat meter, measure, bar line, double bar line, repeat sign, and song form.

Third Grade: Third Graders will review second grade concepts and identify and label different elements of music and experience them through contemporary and folk songs, dances, listening activities, books, song tales, and creating their own ideas about music and compositions. They will also learn music supporting their class projects throughout the year.

- Vocal Exploration: Matching pitch and melodic contour.
- Melody: Identifying and reading sol, mi, la, re, do, and absolute pitch names on the treble clef.
- Rhythm: Identify rhythms ta, ti-ti, rest, half note and sixteenth notes.
- Creative: Organizing sounds, composing melodies and rhythms, improvisation with rhythms and melodies.

- Musical Elements: Four beat meter, measure, bar line, double bar line, repeat sign, and song form.
- Recorder: Identify and play B, A, and G notes and create song compositions.

Fourth Grade: Fourth Graders will review third grade concepts and identify and label different elements of music and experience them through contemporary and folk songs, dances, listening activities, books, song tales, and creating their own ideas about music and compositions. They will also learn music supporting their class projects throughout the year, as well as sing songs in canons and 2 parts.

- Vocal Exploration: Matching pitch and melodic contour.
- Melody: Identifying and reading sol, mi, la, re, do, high do, fa, absolute pitch names on the treble clef, and the pentatonic scale.
- Rhythm: Identify rhythms ta, ti-ti, rest, half note, sixteenth notes and the whole note.
- Creative: Organizing sounds, composing melodies and rhythms, improvisation with rhythms and melodies.
- Musical Elements: Four beat meter, measure, bar line, double bar line, repeat sign, and song form.
- Recorder: Identify and play B, A, G, C, and D notes and create song compositions.

Fifth Grade: Fifth Graders will review fourth grade concepts and identify and label different elements of music and experience them through contemporary and folk songs, dances, listening activities, books, song tales, and creating their own ideas about music and compositions. They will also learn music supporting their class projects throughout the year, as well as sing songs in canons and 2 parts.

*Vocal Exploration- Matching pitch and melodic contour.

- Melody: Identifying and reading sol, mi, la, re, do, high do, fa, ti, absolute pitch names on the treble clef, and the pentatonic scale.
- Rhythm: Identify rhythms ta, ti-ti, rest, half note, sixteenth notes and the whole note.
- Creative: Organizing sounds, composing melodies and rhythms, improvisation with rhythms and melodies.
- Musical Elements: Four beat meter, measure, bar line, double bar line, repeat sign, and song form.
- Recorder: Identify and play B, A, G, C, D, F, and E notes and create song compositions.

4. Science: The students participate in hands-on investigation and exploration, providing them with a solid foundation in Earth, Life, and Physical Sciences. They learn to practice the scientific method and think like real scientists, utilizing meaningful inquiry; observation and exploration; developing and testing hypotheses; and analyzing new information, while further discovering their natural world.

Kindergarten:

- <u>Creating Experiments & My 5 Senses:</u> All Kindergarteners will learn to implement the Scientific Method. This is the six-step process of creating and conducting an experiment (ask a question, gather information, make a hypothesis, experiment, observe and record results, share information). Your child will create experiments around our study of the 5 Senses.
- <u>Living vs. Nonliving Things</u>: Students will identify the features of living and nonliving things as well as what makes them alike and different.
- <u>Animals:</u> Students will study mammals. They will learn the basic characteristics that scientists use to classify all mammals. The Kindergarten class will select a mammal that they want to study in depth.
- <u>Earth Stewardship</u>: Students will create a mini landfill and explore the recycling process. They will begin to recognize the impact of modern human life upon the Earth and work to encourage others to conserve our natural resources.
- <u>Ecosystems:</u> The Kindergartners will develop a basic understanding of ecosystems and how they work. We will focus on ponds and woodlands. In class we will create a closed living water and land ecosystem in an upcycled 2 liter plastic bottle.
- <u>Class-Developed Study</u>: The class will develop a unit of scientific study based on their shared scientific interests.

First Grade:

- <u>The Scientific Method and States of Matter</u>: All First Grade Scientists will learn to implement the scientific method. This is the six-step process of creating and conducting an experiment (ask a question, gather information, make a hypothesis, experiment, observe and record results, share information). Students will create experiments and participate in lab work around our study of States of Matter (solid, liquid, gas).
- <u>Earth and Sun</u>: Students will learn how the Earth and planets in our solar system orbit the sun. 'Students will learn about the seasons and how the Earth's rotation creates our days and seasons.
- <u>Physics Exploration</u>: Students will explore and create a series of experiments testing gravity, force and motion.
- <u>Tree of Life</u>: Students will learn about the Ecosystem of the Baobab Tree. Students will learn about animal diversity as it relates to trees. In the classroom we will also study our Rotting Log environment and learn about animal diversity. Outside of the classroom we will look at our local tree ecosystems.
- <u>Arthropods</u>: Students will study Arthropods and learn their classifying characteristics. They will observe a variety of arthropods living in the science lab. The class will select an insect to study in depth.
- <u>Class-Developed Study</u>: The class will develop a unit of scientific study based on their shared scientific interests.

Second Grade:

- <u>Water</u>: Second Grade Scientists will experiment and observe the properties of water (cohesion, adhesion, and surface tension). They will implement their knowledge of the Scientific Method to create and conduct experiments that test the properties of water. They will also learn about the Water Cycle.
 - Weather: Second Graders will learn to identify different cloud types and seasonal weather patterns.
- <u>Physics Exploration</u>: Students will explore the forces of motion and discover how pushing and pulling can change the direction of objects.
- <u>Fish Study</u>: Students will study Fish. They will learn about their classifying characteristics. Students will learn about freshwater and ocean fish. We will observe fish first-hand in the classroom and students will select an ocean fish to study.
- <u>Class-Developed Study</u>: The class will develop a unit of scientific study based on their shared scientific interests.

Third Grade:

- <u>Human Body</u>: We will compile the students' previous knowledge about the human body and then develop a study based on their questions. Students will explore the brain, heart, digestive system, skin, muscles, blood, germs and bones.
- <u>Our Solar System:</u> Students will learn basic facts about the planets in our Solar System. Students will learn about the structure of the Sun and Moon.
- <u>Matter and Energy on Earth</u>: The children will describe and compare the physical properties of Matter (size, shape, mass, color, texture, smell, etc.).
- <u>Fossil Record and Dinosaurs</u>: Students will discover how fossils are created and what we can learn from the fossil record. We will create a dinosaur study based on information students want to learn.
- <u>Class-Developed Study:</u> The class will develop a unit of scientific study based on their shared scientific interests.

Fourth Grade:

- <u>Earth Structure</u>: Students will investigate and understand the Earth's structure and identify how events like earthquakes and volcanoes occur.
- <u>Rock Cycle</u>: Students will study the rock cycle and learn to classify rocks as sedimentary, igneous, and metamorphic. They will observe and compare the properties of rocks and minerals.
- <u>Scientific Method and Writing Lab Reports</u>: Students will conduct and create experiments with polymers (making different types of slime) as they learn to carefully follow the Scientific Method and write a Co-op School Lab Report.
- <u>Simple Circuits and Electricity</u>: Students will learn about energy and construct simple circuits. Electricity is the most versatile energy source that we have. Electricity has played a vital part of our past. But it could play a different role in our future, with many more buildings generating their own renewable electric power using solar cells and wind turbines.
- <u>Biodiversity</u>: Students will learn about scientific classification and they will classify plants and animals. Each student will also complete a research project about an animal.
- <u>Class-developed Study</u>: The class will develop a unit of scientific study based on their shared scientific interests.

Fifth Grade:

- <u>Scientific Method:</u> Students will review the scientific method and create lab experiments to illustrate their knowledge of the scientific process
- <u>Physics Exploration</u>: The Universe: Students will deepen their understanding of mass, weight, gravity, force, and motion.
- <u>Cells</u>: Students will build cell models and learn about the basic structure of plant and animal cells. All living organisms on Earth are divided into cells, they are the basic structural unit for all organisms.
- <u>Plants</u>: Students will identify the basic structures of plants and define their purpose. Students will study Photosynthesis and conduct plant experiments.
- <u>Classification and the Diversity of Life</u>: Students will discover how scientists classify all life on Earth. In this unit, students gain an appreciation for diversity in the animal kingdom, learn how scientists classify animals by their physical attributes, and understand how those attributes interact with their environment. They then research one of their choosing to learn about the life cycle, habitat, and physical characteristics that make that animal unique.
- <u>Ecosystems:</u> Students will learn about life in an Ecosystem. They will explore food chains, energy pyramids, and other factors that keep animal species alive. Working in groups, students will identify an ecosystem type. Individual students will create a project about a specific animal within their group's ecosystem. Students will also create their own closed living ecosystems to observe over a month.
- <u>Human Body:</u> Students will learn to identify the organs in the human body. They will learn about their human body systems
- <u>Class-Developed Study</u>: The class will develop a unit of scientific study based on their shared scientific interests.

5. Movement: The students have movement two times a week where overall focus is on organized games, activities, sports and play, including individual movement challenges and group games. Games include soccer, kickball, jump rope and even invented games. They often work on safety, understanding instructional language and include an introduction to movement concepts. Students are also introduced to basic manipulative skills and learn safety, respect and instructional language. While learning choreographed movements, we encourage each child to have fun and be engaged.

Kindergarten:

- Students will begin to take the locomotor skills learned in Pre-K and apply them to fitness movement and exercise
- Students will begin learning how to perform underhand and overhand toss to objects and through target games such tic tac toe
- Students will begin to learn how to strike objects using their hands
- Students will begin to learn how to chase, flee, and dodge in a safe space
- Students will learn basic sports skills such as dribbling a basketball, kicking a soccer ball, jumping rope etc
- Students will learn their muscles in a song

First Grade:

- Students will begin to take the locomotor skills learned in Kindergarten and apply them to fitness movement and exercise
- Students will begin learning how to perform to toss and catch to a partner at certain distance apart
- Students will begin to learn how to strike objects using implements
- Students will begin to learn how to perform fitness skills such jumping jacks, sit ups,etc
- Students will learn basic sports skills such as basketball, soccer, jumping rope, bowling, etc
- Students will learn their muscle groups through a song

Second Grade:

- Students will learn health and fitness related skills, such as jumping jacks, push ups, abc planks, etc
- Students will begin to understand the benefits of cardiovascular fitness and learn how to connect cardiovascular fitness to different types of activities
- Students will learn to perform sport skills such as basketball, soccer, bowling, nets sports and volleyball
- Students will learn these sports skills and understand how to play a game like situation to get a better understanding of the game is played
- Students will learn how to perform to take heart rate and understand to apply heart rate to warm up activities

Third Grade:

- Students will learn health and fitness related skills, such as jumping jacks, push ups, abc planks, etc
- Students will be learning a variety of muscular and cardiovascular activities
- Students will learn and understand how to play certain sports basketball, soccer, bowling, nets sports and volleyball
- Students will learn these sports and understand how to play a game like situation through smaller games
- Students will learn how to take heart rate during warm up activities and write their results down each week
- Students will be performing some cross curricular activities

Fourth Grade:

- Students will learn health and fitness related skills, such as jumping jacks, push ups, abc planks, etc
- Students will be learning a variety of muscular and cardiovascular activities
- Students will learn and understand how to play certain sports basketball, soccer, bowling, nets sports and volleyball
- Students will learn these sports and understand how to play a game like situation through smaller games
- Students will learn how to take heart rate during warm up activities and write their results down each week
- Students will be performing some cross curricular inside the classroom and woodshop
- Students will be learning about nutrition through various types of games

Fifth Grade:

- Students will learn health and fitness related skills, such as jumping jacks, push ups, abc planks, etc
- Students will be learning a variety of muscular and cardiovascular activities
- Students will learn and understand how to play certain sports, such as basketball, soccer, bowling, nets sports and volleyball
- Students will learn these sports and understand how to play a game like situation through smaller games
- Students will learn how to take heart rate during warm up activities and write their results down each week
- Students will be performing some cross curricular inside the classroom and woodshop

- Students will be learning about nutrition through various types of games
- Students will understand the relationship between physical activity and individual well being
- Students will work constructively with others to accomplish a variety of goals and tasks
- Students will demonstrate the ability to apply the decision making process to physical activity

6. Library: During our weekly teacher-led library classes we focus on creating a love and enjoyment of books. With the support of our Literacy Specialist the children learn the rules and procedures of responsible library users. They learn how to select, checkout, and care for books. While reading award-winning books they talk about how to distinguish between fiction and nonfiction books, about the parts of a book and story elements. They read fairy tales, folktales, fables, fantasy and biographies, identifying where stories take place incorporating geography concepts. They identify what an author and illustrator does and make predictions about a story based on pictures. They explore reference materials and learn how books support the research process.

7. Technology: We believe that technology is an important tool for learning, research and communication. It supports project-based education by incorporating carefully curated learning tools and increasing research skills while differentiating instruction for the needs of each child. We use it to extend project work with virtual field trips and educational videos. For the first years, technology may be used simply to connect to an expert via Skype or take a virtual field trip to a far away place. Starting in Second Grade, the children begin to learn keyboarding skills with our Chromebooks. They also learn about video creation for culminations, Google Docs and The Cloud. They create and share documents. These skills continue in Third, Fourth and Fifth Grades and develop further as they begin to use online search engines to support research, learn about finding reliable websites, what cyberbullying is and how to edit/peer edit their work. Older grades have televisions in their classroom meeting areas as updated projectors or document cameras, supporting learning by showing and sharing visuals images, videos and documents.

<u>8. Health</u>: Third, Fourth and Fifth Grades begin to study health topics. During these sessions, led by our social worker, the focus is on creating a safe environment to provide students with accurate information and clear communication skills around issues of human development and changing bodies, social relationships, gender, and other ideas that arise. We begin listening to children's questions and ideas and then construct some of the instruction accordingly.

9. Performing Arts: We begin our drama program in the Third Grade through Fifth Grades. Through outside program Child's Play NY, we use this program to explore our talents and interests in acting, singing, dancing, writing and stage production as well as boost confidence and instill a sense of respect for creativity and working together for a shared goal. The students spend time learning the components of dramatic movement, sound and study. They culminate with a performance that they create and perform in for the entire elementary school.