



# Apple Orchard School

Where children grow. Inside and out.



## Curriculum Guide & Program Information

## CURRICULUM PHILOSOPHY

Creating an environment of trust and positive feelings toward learning within an active farm community is the primary focus of Apple Orchard School. This undertaking is best accomplished during the critical first three years of a child's school experience. We see preschoolers as capable, curious, creative, caring, and connected individuals striving to develop meaningful relationships that are the foundation for well-being and knowledge. We encourage children to build relationships with their families, teachers, peers, animals, and the farm around them, creating multiple avenues to enhance the development of learning. We are so lucky to have a farm for a classroom.

As children develop and master skills across all developmental areas, they will find many routes to success and will thrive by learning about themselves and others. By helping children interact successfully with peers in their class, we seek to strengthen the children's self-image as confident and capable learners. The curriculum is designed to challenge children individually and to give them many opportunities to explore, experience, and discover at their own pace and developmental level. Through child-initiated and teacher-directed learning experiences, children become better able to assess new situations and solve problems.

### ANTI-RACIST and MULTICULTURAL FOCUS

*"The only way to undo racism is to consistently identify and describe it –  
and then dismantle it."*

~Ibram X Kendi

Our school is committed to providing students with opportunities to explore their differences and similarities through books, experiences, conversations, and the diversity of families in our community and our teachers. As early childhood specialists, we recognize we are often uniquely positioned to be the first adults to address the topic of race with our students. It is never too early to begin these conversations. Comments children make that are gender or racially stereotypical are viewed as opportunities for deeper discussion and learning. These are conversations we embrace, not avoid.

As early childhood educators, we focus extensively on developing the social-emotional skills of our students. We recognize those skills are best practiced by experiencing differences and similarities through the “windows and mirrors” students encounter daily. They learn through “windows” when they are attuned to perspectives and experiences different from their own, and they learn through “mirrors” when they see their own experiences or perspectives being reflected to them, affirming their place in our world. We want children to feel unique and treasured just as they are.

We actively encourage families to share their religious, spiritual, and cultural traditions with their child’s class. We strongly believe in creating opportunities for our students to ask questions about religious or cultural practices different from their own. Teachers embrace these opportunities to launch conversations about various cultural experiences and values.

## **ANIMAL CURRICULUM**

Children learn indoors and outdoors through play-based experiences and hands-on exploration. Children develop crucial cognitive, verbal, social, and emotional skills as they play. They make discoveries, build knowledge, experiment with literacy and math, and learn to self-regulate and appropriately interact with others. We use our outdoor environment extensively for their learning and the development of the whole child. The wild animals (geese, hawks, rabbits, deer, turtles, etc.) and our domestic animals (chickens, ducks, a miniature horse, a donkey, and two goats), along with the growing and harvesting of crops, play a prominent role in our teaching. Our teachers can expand upon the children’s natural curiosity with the excitement of “teachable moments,” always plentiful in such a unique farm environment.

While caring for the environment and our animals, the children spend a great deal of time outdoors noticing the world around them. Rather than just saying “Hi” to our animals and patting them, we aim to build the children’s interest in and involvement with the animals that live here on the farm. As part of our Animal Curriculum, teachers choose one animal a month to explore more deeply. After brainstorming to see how much the children know about the animal and what they would like to learn, teachers build on their natural curiosity by introducing facts like where the animal lives, what it eats, and how it moves. Teachers provide insight into the life of the animal and open

up avenues for further exploration. Do they know turkeys sleep in the trees, goats have four stomachs, or there is a difference between a mini horse and a pony? If the class studies turtles, they can go to the pond and observe them in their natural habitat. Teachers will use a variety of open-ended questions to spark curiosity and open the children's eyes to noticing what goes into a habitat. For example, as the children observe ducks swimming, teachers may ask, "What shape is a duck's foot?" and then help the children express their thoughts and think about why a duck has a webbed foot. Also, as the ducks dip under the water, many questions arise: "Why do they do that? How long can they hold their breath? What do they find under the water? Do they have gills like fish?" Through this process, the children not only gain knowledge and build simple scientific skills of asking questions to attain answers in a practical, hands-on manner but also gain respect for their environment. The children explore locations on the property, such as The Pine Woods, The Rainforest, Salamander Rock, and the Elephant Trees.

We use these unique opportunities on the farm to teach children many skills they will need later in life. We teach them about friendships, family, empathy, compassion, responsibility, teamwork, accountability, and cooperation. Our goal is to instill in each child a love for learning, an interest in asking questions, the confidence to take a guess, and the ability to appreciate the value of friends and family truly. All of these attributes help enable children to be responsible and successful wherever they go from here.



## **FARM CURRICULUM**

Apple Orchard is located in the center of Allandale Farm, Boston's oldest working farm. The hands-on opportunities to learn about farming and the growth of food and plants are exciting. As a result, every Wednesday through the fall season, we have partnered with Allandale Farmers to expose the children to a direct lesson about farming. An example of our Farm Classes schedule is below.

## Wednesdays 10:00 am & 10:45 am

Curtis (caring for Scottish Highland steer)  
Composting  
Food Discovery  
Tractors  
Greenhouse (caring for plants / working in a greenhouse)

## WHAT IS A PLAY-BASED CURRICULUM?

Preschool children learn best through **HANDS-ON EXPLORATION** and **PLAY**. Play is deeply formative for children and must be at the core of our curriculum. Play develops precisely the skills children need to be successful throughout their lives. Theorists have argued that children's thinking develops through activity-based learning and social interactions with adults and peers. Play has long-lasting benefits. Play fosters creativity and imagination. Many qualities that contribute to happy, productive lives, such as persistence, planning, problem-solving, ability to communicate, and capacity to collaborate, have their roots in early childhood play.

Play has three stages. First, children participate in solitary play, which means engaging in activities alone, without others. Second, they engage in parallel play, which means playing independently but next to others. The third step of play development is cooperative and involves group play, where a child takes on roles in organized, interactive play.

What does purposeful play look like? In an exemplary classroom or adventure site, you will see an area organized by a caring, responsive teacher tuned in to child development. Activity centers should be filled with materials that invite exploration, excite the imagination, require initiative, and prompt collaboration. The space should hum with noise and activity. While play is at the core of our program, we interweave facets of the Montessori, Reggio, and Waldorf philosophies into our curriculum. At Apple Orchard, the focus of these well-researched early education programs is of great value to our classrooms. The day is structured with opportunities for independent learning, small and large group learning, and extensive outdoor farm and adventure time for movement. Below, we have outlined many play-based areas that will be seen

throughout the school day, whether children are inside or outside, and have explained the educational benefits they provide for young children.

**ART** allows children to explore various media and techniques using tools such as crayons, Cray-pas, chalk, paint, scissors, clay, glue, watercolors, and finger paints. For projects, we also use leaves, branches, seeds, pods, and feed grain from the farm. Exploration of materials fosters the development of imagination and creativity and builds small muscle control, hand /eye coordination, and listening skills. Outdoor art might include sketching trees, making flower chains, designing fairy houses, or drawing in mud. A child's ability to create something she can share and show others fosters pride and a sense of accomplishment.

**BLOCK BUILDING** construction activities actively involve using fine and gross motor skills. Children learn to play cooperatively and build imaginative structures by picking, stacking, balancing, lifting, and fitting blocks together. They begin to understand many concepts that lead to later mathematical thinking and problem-solving. Children build caves, bridges, seesaws, and sculptures using sticks, stones, logs, and any other available outdoor materials they can find. When building, children use concepts that include shapes, sizes, patterns, symmetry, and units of measure. They are also actively exploring how to make what is in their minds into an actual structure, which involves abstract thinking, a critical skill in later academic work.

**CHOICE TIME / FREE PLAY** is when children may select various activities to explore with friends. Peer interactions occur alongside specific developmental skill growth. Having the opportunity to craft and carry out ideas builds creativity, provides opportunities for developing social and emotional ties with classmates, and involves motor planning skills. Children test making decisions and seeing how they are received. These activities can be offered indoors or outdoors on the playground.

**CIRCLE TIME** and **MORNING MEETINGS** are when we come together to talk about plans for the morning and complete daily routines such as calendar, weather, job boards, and attendance. We often read stories, sing songs, complete simple projects, discuss our feelings, and investigate our day's theme. This time helps foster listening skills, the ability to follow directions, the discipline of taking turns, the building of attention spans, and the encouragement of using language to express thoughts and ideas. Circle either happens in the classroom or our outside adventure spots.



**COOKING** is an exciting part of our curriculum. It is an activity in which we engage safely by being aware of dietary limits and discussing healthy foods and eating. It is a thrill for the children to eat food or play with the concoction they have prepared for their class. Skills such as listening and following directions are paramount. Children strengthen their social and emotional connections with their friends as they work together.

Additionally, cooking provides the opportunity for curiosity, experimentation, creativity, problem-solving, predicting, and measuring, all essential pieces of cognitive development. They build vocabulary and language as they hear the directions and share their thoughts with friends. We make monthly birthday snacks, snacks related to a topic of study, treats as gifts to other classes, or products we can use and explore in the classroom, such as play dough and Gak. Chopping, squeezing, spreading, and mixing are just some of the actions that improve fine motor skills and eye-hand coordination. Collecting vegetables from the fields gives the children practical experience and a connection to what the land produces.

**DRAMATIC PLAY** allows children to expand their growing imaginations and explore social dynamics through “role-playing.” Themes change to reflect the topic being studied and may incorporate such locations as post offices, police barracks, restaurants, homes, veterinary offices, wolf dens, campsites, fire stations, doctors’ offices, etc. Often, children work through their natural anxieties when they can “become” puppies, astronauts, doctors, or dentists through creative play.

We encourage children to develop their creative thinking and express their feelings by using puppets and music to animate and illustrate stories. A great deal of dramatic play occurs in our outdoor settings. These may include adventure locations such as Sleeping Beauty’s Castle, New Hampshire Woods, The Jungle, The Rain Forest, and The Pine Woods. The children also generate adventures on our Train in the woods, engage in family games in stick huts, or build gross motor skills climbing giant puddingstone rocks.

**LITERATURE ARTS** are included in each classroom. These areas comprise a library of books from our all-school library, which are rotated regularly to correspond to thematic units. Our shelves display a variety of books, including picture books, big books, wordless books, books of lists, concepts (including self-concepts), classic stories, and

group favorites. As literature is one of the best ways for children to learn anti-bias and anti-racist thinking, we pay particular attention to varying the race, gender, and culture of the authors and the heroes or heroines of the stories.

Children can explore books on their own, which we refer to as “book looking.” In addition, stories are read daily in small and large groups and individually. Teachers pause often and ask questions of the children to help teach how a story progresses with a beginning, middle, and end. Children are invited to make predictions based on what they learned so far from a story. We also expose the children to different types of writing, such as poetry, wordless books, or chapter stories. Stories often contain moments of crisis where decisions need to be made. Consequently, literature encourages children to think more about their feelings and allows them to develop their own opinions. It also helps them have more of an understanding of other people’s thoughts. Literature exposes children to correct sentence patterns and word usage and builds their collection of experiences. Listening to stories improves both listening and critical thinking skills.

Often, story time takes place outside in the natural environment. Children create their own stories that are extensions of their favorite books. Making connections between spoken and written words is an essential pre-reading skill. It would not be unusual to see children acting out their favorite literary stories in stick structures they create in the farm woods or giant climbing trees.

**MATH** is experienced daily through exploration, discovery, and problem-solving. Puzzles, blocks, cooking projects, graphs, manipulatives, building materials, outdoor adventures, and stories enhance a child’s verbal, perceptual, quantitative, and memory skills. Activities including counting, sorting, matching, comparing, patterning, voting, estimating, guessing, and measuring are integrated into all curriculum areas. Adding activities in the woods, such as classifying, matching, and counting the natural materials children find, enhances the learning process and illustrates the importance of math skills in our lives.

**MUSIC / MOVEMENT** is an integral part of our program. Music from all over the world elicits children’s love of singing, dancing, and exploring rhythm instruments. While listening to and learning new songs, we hope to foster an appreciation of other cultures. Music is a language and is a vibrant way to teach almost anything. Children



are much more likely to remember topics such as the alphabet, numbers, rhymes, and songs when accompanied by a tune. Music is also a natural outlet for children to express their feelings spontaneously, and they are encouraged to create their own music. Outdoors on walks, we often sing familiar and made-up songs and encourage using natural objects to produce sounds.

**OUTDOOR PLAY** is essential for children of all ages. Being on a working farm gives our students a unique opportunity to bolster their independence, strengthen their sense of adventure, and expand their gross motor skills, physical agility, and coordination. Children naturally seek to figure out how the world works, and being outside allows this curiosity to bloom. Outdoors enable children to explore, develop new friendships, cooperate on a project, or work independently on a creative idea. Being outside affords children a better opportunity to take risks and try extensive activities that might, initially, be scary.

Swinging and hanging upside down on the monkey bars, on swings, or from tree branches are activities that help develop the vestibular system, contributing to balance, spatial awareness, and emotional regulation. Social skills are enhanced through active play, the use of language while on the go, and unstructured interactions with peers. We are in our outdoor classrooms in all seasons and weather!

**SCIENCE** is a way for us to develop children's abilities to observe and interpret the natural and physical world around them. Children have an inherent curiosity and interest in the "functions" of nature. We explore the ducks on the pond and worms, butterflies, bees, and growing plants in the fields. By answering questions like, "What do you think will happen?" "What do you see happening?" and "How do we know the bird is dead?" children learn to expand their thought processes and observation skills. We also provide more traditional science experiments to practice the skills that later academic environments will require. Using natural, developmentally meaningful materials, the children become more comfortable questioning, predicting, experimenting, and drawing conclusions.

**SENSORY PLAY** involves learning by doing. The sand and water tables, play dough, clay, paint, light tables, shaving cream, and many other tactile materials provide the children with various sensory stimulation. These areas of activity promote language development, peer interaction, cooperation, and listening skills. It has been proven we

learn best when we engage all five of our senses. Sensory activities build nerve connections in the brain's pathways, leading to a child's ability to complete more complex learning tasks. Sensory play supports cognitive growth, fine and gross motor skills, and problem-solving skills. It facilitates exploration and using the scientific process. Using the textures we experience outside, such as mud, puddles, ice, snow, and mulch, provides children with an exciting extension of classroom sensory materials.

## LANGUAGE ARTS

**In our Language Arts curriculum,** we explore a variety of literature and “meet” authors whose work reflects a broad range of topics. We have a variety of animal and farm-focused books in addition to classic literature. In the last few years, we have built a comprehensive selection of books on diversity and multiculturalism to support conversations about race. Through developing stories and studying books and illustrations, we enhance phonemic awareness in preparation for reading and comprehension. In this way, we foster children's love of reading and writing and form a connection to our outdoor locations.

### **CHICKEN COOP (2.9 years old)**

- build listening skills through culturally rich, anti-bias short stories, songs, and poetry
- use puppets, stories, and songs to help children express themselves and their feelings
- encourage children to use words and language in communicating their needs
- expand vocabulary and build connections between the spoken and written words

### **CLASS I (3 years old)**

- enhance listening skills through stories and activities
- expose children to a variety of culturally rich, anti-bias literature
- expose children to letters and sounds by looking for letters and shapes outdoors in cloud formations, branches, or on farm equipment
- introduce book handling skills (top / bottom, author / illustrator)
- use puppets, stories, and songs to help children express themselves and their feelings
- continue fine motor activities (such as using tweezers to dissect owl pellets) in preparation for later writing development

- develop sequencing and prediction skills
- introduce predicting skills as we study the life cycles of butterflies and frogs
- expand on children's current vocabulary, including introducing words like "deciduous," as we study the trees on the farm, "evaporation," as we watch a puddle disappear, or "decomposition," as we see our jack-o-lanterns age
- explore rhyming in songs, stories, and play

**CLASS II (4 years old) – *Handwriting Without Tears\** is the program used to introduce and expose the children to letter formation and sounds.**

- expose children to a variety of culturally rich, anti-bias literature
- strengthen fine motor development by practicing writing shapes and letters with sticks in the dirt and mud
- develop auditory and visual discrimination skills by noticing and looking for animal tracks, cloud shapes, and birdsongs
- develop sequencing and prediction skills
- experience print as a source of pleasure and fun
- expand exposure to letters, letter recognition, and sounds, for example, by noticing letter shapes out on the farm in trees, in the clouds, and on the ground
- discover and predict a story's plot through activities such as taking fairy tales like *Goldilocks and the Three Bears*, *Sleeping Beauty*, and *The Three Billy Goats Gruff* and acting them out on the farm, creating a more robust sense and memory of plot.
- by year-end, to recognize most of the uppercase letters in the alphabet
- begin to develop phonemic awareness
- explore rhyming in songs, stories, and play
- increase book handling skills (title, author / illustrator, word flow, parts of a book)

**CLASS III (5-6 years old) *Handwriting Without Tears\**, introduced to the 4-year-olds, is the primary program used to guide understanding of the formation and sounds of letters and the meaning of letters when put together.**

- expose children to a variety of culturally rich, anti-bias literature
- recognize and write upper and lowercase letters
- expand fine motor skills by working with tools such as sticks to practice writing and tweezers to pick at a rotting log to discover what's living inside
- ask and answer questions about key details in written text to develop comprehension
- demonstrate understanding of the organization and basic features of print by creating their own stories, often about adventures on walks throughout the farm

- name the author and illustrator of a story and define the role of each
- know and apply grade-level phonics and word analysis skills in decoding words
- read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do)
- use a combination of drawing, dictating, and writing to compose informative / explanatory texts
- become familiar with the literature of various genres using the natural outdoor theater spots to create and act out plays
- develop phonemic awareness: rhyming, syllables, initial, medial, and final sounds
- begin to read short vowel words and letters

*\*Children who master handwriting are better, more creative writers. The earlier we teach children to master handwriting, the more likely they will succeed in school and write quickly and easily in all subjects. We are sensitive to whether children are ready to write, so we use fun, engaging, and developmentally appropriate instructional methods to enable children to master handwriting as an automatic and comfortable skill.*

## MATHEMATICS

**Our Mathematics curriculum aims** to include math activities in daily routines, explore numbers, develop mathematical reasoning and problem-solving skills, and provide varied manipulatives for exploration and enhanced understanding. We use our outdoor environment to recognize patterns and shapes and for counting and measuring.

### **CHICKEN COOP (2.9 years old)**

- explore various activities with shapes, sizes, and patterns as we collect leaves, acorns, and other natural objects during scavenger hunts on the farm
- discover non-standardized units of measurement (blocks, rocks, sticks, footsteps)
- develop problem-solving techniques and strategies, such as how to find a safe home for our ducklings
- expose children to graphing and charting (taste tests, shoes vs. sneakers)
- use cooking activities with crops they gathered from our fields for counting, measuring, and comparing
- explore a variety of materials for counting, matching, and sorting (acorns, feathers, leaves) from 1 to 10

### **CLASS I (3 years old)**

- explore shapes, sizes, and patterns with various materials collected on walks throughout the farm
- enhance problem-solving strategies as we do activities like figuring out how to return a baby bird to its nest
- develop graphs and charts through activities like graphing the number of sunny and rainy days in a month, which apple tastes the best, which pumpkin weighs the most
- introduce concepts of time using seasons and a picture clock
- use blocks and other building materials to explore shapes, sizes, and patterns to build things like "fairy houses" and huts in the woods
- utilize non-standard measurement methods like how many blocks are tall, how many human feet are long, etc.
- focus on counting by rote from 1 to 20
- develop one-to-one correspondence in activities like counting acorns and pine cones from a collecting walk
- classify items through sorting like rocks, sticks, leaves, and vegetables
- develop observational skills by using tweezers to encourage the children to slow down and look more carefully, noticing the smaller treasures outdoors
- introduce measurement through cooking with vegetables and berries harvested on the farm
- introduce size comparison, such as relating the differences in bugs we find in the woods (small / medium / large)

### **CLASS II (4 years old)**

**The Math curriculum for Class II is guided by a program called Building Blocks. It is designed to embed mathematical learning into young children's daily activities, using active participation to develop mathematical thinking. It emphasizes the development of conceptual thinking and reasoning abilities and builds mathematical knowledge of numeracy, shape recognition, and mathematical language through individual, small, and large-group activities.**

- design and utilize simple graphing strategies using objects such as leaves, milkweed pods, flowers, or field vegetables
- focus on counting by rote from 1 to 20
- enhance knowledge of basic shapes and introduce basic geometry by exploring the woods and fields
- continue to develop problem-solving skills
- introduce the concepts of time (seasons / routines) and money

- work on non-standard (blocks and cubes) and standard methods of measurement (ruler)
- make size comparisons (small / medium / large) using materials collected on the farm, like acorns, leaves, sticks, pine cones, and rocks
- build on measurement skills introduced in Class I
- introduce patterns and pattern predictions using objects such as rocks, sticks, or pine cones
- enhance calendar skills (days of the week, months of the year)

### **CLASS III (5-6 years old)**

**The Math Curriculum in the Class III year is guided primarily by two approaches:**

Investigations and Richardson Math. These two programs were selected to implement lessons based on the five Common Core State Standards for Kindergarten. Although the children will be exposed to all five standards, we will devote more time learning numbers than any other topic. In kindergarten, it is critical there be a stronger emphasis on representing and comparing whole numbers and describing shapes and space.

- identify and write numbers – 1 to 100
- count a given number of objects
- compare numbers
- understand addition as putting together and adding to, and subtraction as taking apart and taking away
- work with numbers 11 to 19 to gain foundations for place value
- classify objects and count the number of objects in categories
- identify and describe 2D and 3D shapes, including squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres
- identify and create patterns using our natural objects such as twigs, rocks, and leaves
- analyze, compare, create, and compose shapes, many of which we identify around the farm
- expose to other languages in counting from 1 to 10, i.e., French and Spanish
- gain familiarity with non-standard (blocks and cubes) and standard methods of measurement, including linear measurement, area, volume, time, and money

# **CREATIVE ARTS**

## **ART / MUSIC / DRAMA**

**In our Art curriculum,** we endeavor to expose children to various media and artistic instruments. Our goal is to enhance children's confidence with varied materials, develop a sense of appreciation for art, art history, and artists, including diverse artists, and teach them about specific techniques and methods used by artists. In our creations, we use natural and recycled materials, particularly our native flora and fauna.

**In our Music and Drama curriculum,** we expose children to a variety of musical genres. In a supportive environment, we strive to build appreciation for many types of music, explore rhythm and sound, develop an understanding of musical instruments and the performing arts, including diverse performers, and enhance children's creativity and comfort. We also provide opportunities for children to create their musical instruments, often using recycled materials.

### **CHICKEN COOP (2.9 years old)**

- expose children to a variety of media for hands-on exploration and creativity
- create dramatic play opportunities as we engage in activities like building "The Three Bears" house in the Pine Woods
- develop self-calming techniques such as yoga, Tai Chi, and breathing imagery
- listen to songs, stories, and music, including music and songs from other cultures
- introduce children to musical instruments, including those from other lands, and create instruments out of gourds and other natural objects we find on our walks
- discover culturally rich stories and music
- participate with a group and learn turn-taking by packing and unpacking a picnic and waiting for boat rides on the pond
- develop imagination and rhyming through dramatic play

### **CLASS I (3 years old)**

- expose children to a variety of media to discover, explore, and create artwork, especially with the natural objects from a collecting walk
- foster participation and singing along with the group
- use puppets to act out stories
- enhance listening skills and the discipline of following directions, such as keeping in mind our "teacher sandwich" (teacher in front and teacher in back) on walks around the farm



- listen to and recognize music and songs from many cultures
- discover diverse stories and music
- introduce a variety of musical instruments, including those from other cultures, and assist students in designing and creating their own
- provide opportunities for dramatic play as we travel across the “Billy Goat’s Gruff Bridge” in the front field and explore “Sleeping Beauty’s Castle.”
- learn and act out familiar songs and stories
- experiment with textures and media, including collages, clay, wood, paint, and chalk

### **CLASS II (4 years old)**

- explore various types of art
- experiment with textures and media, including collages, clay, wood, paint, chalk, paper mâché, and canvas
- explore two-dimensional artwork
- listen to music in nature, such as a bird’s song or the wind
- create and perform for friends and family - stories, songs, and mini plays
- expand on dramatic play themes and materials
- discover various artists and their techniques
- listen to and recognize music and songs from many cultures
- recognize safety precautions, as needed, with certain media and/or tools
- integrate natural materials into art activities such as painting with broccoli stalks or printing with apples, peppers, eggplant slices, or pine branches

### **CLASS III (5-6 years old)**

- emphasize backgrounds and details in the artwork
- gain familiarity with art concepts, including line, color, shape, and perspective
- explore two and three-dimensional art forms
- perform songs and recite poetry for other students and staff
- explore various artists and their techniques
- show appreciation for the artwork of others
- create musical instruments to use in music classes and performances
- listen to and recognize music and songs from many cultures
- re-tell familiar stories using props from outside, such as a stump for a throne or a tree log for a boat

# SCIENCE

**Within our Science curriculum,** our focus is building children's curiosity about the world around them. We develop observational and recording skills, expose children to an assortment of scientific tools, create a strong sense of responsibility for the environment, enhance children's problem-solving and logical thinking skills, provide opportunities to examine natural objects and learn more about them, learn about and cook with food grown on our farm, and plant and grow flowers and vegetables.

## **CHICKEN COOP (2.9 years old)**

- provide hands-on exploration with developmentally meaningful materials, such as using magnifying glasses to discover ant trails at Salamander Rock
- foster sensory exploration with various textures and materials, including the discovery of the different textures of bark
- introduce children to the concept of sink/float, seasons (using the changes we see on the farm as a measure), and weather
- introduce scientific language and vocabulary such as discover, measure, dissolve, decompose, and energy
- create a developmentally appropriate science discovery area in the adventure destinations by setting up areas with magnifying glasses, tweezers, bug boxes, etc.
- introduce scientific tools and equipment for observation or specimen collections
- expose children to habitats through the use of ant and worm farms
- plant seeds to expand an interest in growing things
- enhance the natural curiosity about the world around us

## **CLASS I (3 years old)**

- build an awareness of the natural world around us through adventure walks around the farm
- encourage sensory exploration with various textures and materials, including mulch, stones, and mud
- develop an understanding of compare and contrast during cooking projects by asking questions such as, "What happens when you add water to the mix? Does it look the same?"
- ask many open-ended questions
- expose children to the habitats and life cycles of caterpillars, frogs, and worms as we explore the woods and pond

- expand on the concepts of sink / float, seasons, and weather, including testing materials we collect on our walks to see if they sink or float, “adopting” a tree to watch how it changes in the different seasons, and checking the weather conditions before we start on an outdoor adventure
- provide developmentally appropriate materials for exploration and discovery through collection walks
- develop prediction skills by asking questions like, “How many kinds of bugs do you think we will find under that log?”
- build an appreciation of our environment through composting and recycling
- introduce children to scientific tools, including binoculars, magnets, tweezers, prisms, magnifying glasses, bug boxes, and insect nets
- create charts and graphs for comparisons and recordings

### **CLASS II (4 years old)**

- introduce children to scientific tools, including binoculars, magnets, tweezers, prisms, magnifying glasses, bug boxes, and insect nets
- explore life cycles (with particular awareness of our pond life), properties of objects, weather patterns, and the impact of decomposition and composting
- brainstorm and predict the outcome of various experiments, like how fast snow will melt when we bring it inside
- provide developmentally appropriate materials for self-discovery
- create charts and graphs for comparisons and recordings by, for example, graphing nature using a comparison of the size and number of objects found on adventures or weather patterns such as rainfall or snowfall
- create journals with pictures to record scientific findings and discoveries with an emphasis on planting, growing, and turning over large rocks/logs

### **CLASS III (5-6 years old)**

- explore the life cycles of plants, animals, and their habitats of ponds, woodlands, oceans, treetops, and forests
- identify how an organism’s habitat provides for its basic needs
- differentiate between living and nonliving things
- recognize changes in appearance animals, and plants go through as the seasons change
- demonstrate that the way to change the motion of an object is to apply a force by giving it a push or a pull
- provide opportunities to conduct experiments by making a hypothesis and asking follow-up questions

- develop a curiosity about and interest in the world around us by walking along fields of food crops, observing pond life, and helping with animals in the barn
- expand exposure to scientific terms such as inertia, vacuum, energy, dissolve, density, expansion, and contraction
- encourage thinking about natural objects through a weekly guessing game called “Mystery Box”
- sort objects by observable characteristics such as size, shape, color, weight, and usage

## **SOCIAL STUDIES**

**Our Social Studies curriculum strives** to develop a sense of community, explore basic mapping skills, and build geographic understanding to enhance children’s knowledge of various countries, cultures, and races. We spend the entire year bringing in authors and book themes from different cultures and focus one week on acknowledging Black History in our country in ways the children can understand and celebrate. Through community service projects, we work to build a sense of community and “civic” participation. We explore the growth cycle of plants and lifecycle of animals. We use our farm layout to make maps, the Allandale Farm stand as a resource for a farming lifestyle, and our pond to learn about ducks, geese, tadpoles, turtles, water plants, and insects.

### **CHICKEN COOP (2.9 years old)**

- understand the world as it relates to children individually in different environments, including home, family, school, friends, neighborhoods, and communities
- provide activities for “all about me and my family” in the classroom and through our role-playing in the adventure sites
- extend understanding to neighborhoods and communities
- build on existing connections and form new peer friendships
- enhance and encourage developmentally appropriate social skills (listening to others, waiting for a turn, using words to communicate needs), including holding hands with a buddy on a walk, waiting on the shore for a boat ride, or letting teachers know when he/she needs to rest

### **CLASS I (3 years old)**

- build on established relationships and make new connections by sharing what they have discovered on an adventure walk
- reinforce appropriate social skills with adults and peers
- extend the knowledge base to include health and safety skills (making sure they have a teacher in front and behind on a walk), school community, and neighborhood community helpers (firefighters, postal workers, doctors, nurses)
- explore similarities and differences in families, such as size and pets
- encourage the use of words to communicate with others as we hear the excited conversations when they discover things like frogs and turtles on the pond
- create simple classroom expectations that promote safety

### **CLASS II (4 years old)**

- explore the differences between people, animals, and places
- cultivate and care for established relationships
- create classroom expectations for safety and personal comfort
- compare and contrast a variety of cultural backgrounds, countries, holidays, celebrations, and traditions
- build on children's understanding of community service and ways to help others through activities like collecting and donating needed items to an animal shelter or food pantry
- provide, whenever possible, simple maps as reference tools
- begin mapping strategies for our classrooms, the woods, and scavenger hunts
- learn words, greetings, and phrases in different languages to create an awareness of different cultures

### **CLASS III (5-6 years old)**

- tell or show what a map is and what a globe is, and explain how they are used
- identify and describe the events or people celebrated during United States national holidays and why we celebrate them
- identify and describe events people celebrate from other countries, especially those of children in the class.
- identify the student's street address, city or town, Massachusetts as the state, and the United States or the country in which he or she lives
- identify and describe family and community members who promote the welfare and safety of children and adults
- expose students to stories that illustrate honesty, courage, friendship, respect, responsibility, and the wise or judicious exercise of authority

- provide community service opportunities as a class and school, such as the way we collect food for a local food pantry and, to show our appreciation for the work our farmers do, baking breads for their enjoyment
- enhance understanding and appreciation of our farm environment through exploration
- analyze and estimate distances between one place and another
- understand continents as land masses versus ocean / water
- discover different modes of transportation and types of shelters or houses throughout the world

## **MOTOR SKILLS**

**Motor activities are integrated throughout the curriculum.** We aim to develop large (gross motor) and small (fine motor) muscles, enhance and build cooperation skills and good team behaviors, and develop physical skills as an individual, a small group, or a team. We also strive to master body management skills for balance and coordination and create a positive attitude toward physical exercise and nutrition. We use our natural farm environment for rock climbing, ball bouncing and throwing, tree climbing, puddle stomping, hill scaling, wooden structures, and snow fort buildings. We also practice jumping to and from stumps, balancing on logs, rolling down hills, sledding, running, harvesting plants, pulling wagons, and collecting leaves and wildflowers.

### **FINE MOTOR SKILLS**

#### **CHICKEN COOP (2.9 years old)**

- develop small muscles by using crayons, markers, paintbrushes, and scissors
- provide activities that strengthen fine motor skills, like carefully using tweezers to pick up worms from the worm bed
- explore manipulatives and puzzles for the development of fine motor skills
- provide experiences that promote the use of fingers, such as pinching clay, stringing beads, lacing, and tweezing corn kernels
- provide opportunities for working on a vertical surface

#### **CLASS I (3 years old)**

- enhance fine motor development with various art tools and manipulatives
- use tabletop and floor puzzles to enhance the development of hand muscles
- continue to provide activities and materials that strengthen small hand muscles, including trowels to plant seeds in our garden

- use easels on a vertical surface to strengthen a grip
- provide experiences with varied techniques such as beading, lacing (including using natural materials such as grasses and twigs for lacing), and eye dropper art

### **CLASS II (4 years old)**

- develop eye / hand coordination with appropriate activities like throwing and catching a ball and doing puzzles
- begin to recognize hand preferences and pencil grip positions
- enhance small hand muscle development with various projects and activities, including dirt painting and using sidewalk chalk
- encourage writing and build interest in number and letter formation, including using sticks to form letters and numbers in dirt and mud
- provide experiences with varied techniques such as beading, lacing, and eye dropper art
- encourage the use of small muscles through learning to snap and zip clothes and attempt buttons

### **CLASS III (5-6 years old)**

- encourage and assist in the development of marker or pencil grasp and letter/number formation
- provide increased opportunities for writing, drawing, and coloring including taking materials on walks to record findings
- present activities that require the development of cutting skills
- encourage independence with self-help skills that require the use of small muscles, such as buttoning, zipping, using a fork, opening juice boxes, and pouring juice
- expose students to activities that develop small muscles, including scratch art, painting, beading, modeling with clay, writing on easels, and constructing puzzles

### **GROSS MOTOR SKILLS (ALL CLASS LEVELS)**

- provide opportunities for running, jumping, skipping, galloping, and climbing
- play cooperative games that involve simple directions and turn-taking
- create obstacle courses that encourage partnerships and teamwork
- introduce simple, structured games such as basketball, soccer, "Mr. Fox," "Red Rover," "Red Light Green Light," and "Simon Says"
- foster spatial awareness and body movements with activities, including obstacle courses and movement games



- enhance balance and coordination through climbing trees, walking on logs, stump hopping, and extensive pudding stone climbing.
- practice catching, throwing, and ball-hitting skills

## **NOTICE OF NON-DISCRIMINATION**

Apple Orchard is committed to creating a diverse community of families, students, and faculty. We strive to ensure that everyone at Apple Orchard feels a sense of connection and belonging. We view our curriculum through the lens of an anti-racist, anti-bias stance that allows every child and family to feel valued.

Apple Orchard School does not discriminate against children, teachers, or families based on age, gender, race, color, sexual orientation, sexual identity, housing status, religion, cultural heritage, political beliefs, family status, or disability in the administration of its educational policies, employment practices, scholarship awards, or any other school-sponsored program or activity.

## **SCHEDULES**

### **TYPICAL SCHEDULE FOR CHICKEN COOP AND CLASS I:**

- 8:15 - 8:30 a.m. Arrival / Welcome / Outdoor Start
- 8:30 - 9:30 a.m. Walk to an adventure site
- 9:30 - 9:45 a.m. Explore
- 9:45 - 10:00 a.m. Bathroom break
- 10:00 - 10:30 a.m. Circle / Group projects and activities
- 10:30 - 10:45 a.m. Snack (outside weather permitting)
- 10:45 - 11:00 a.m. Bathroom break / Looking at Books / Quiet Time
- 11:00 - 12:00 p.m. Exploration / Carpool - In unfavorable weather, the outside time is shortened, allowing for inside play and movement activities

### **TYPICAL SCHEDULE FOR CLASS II AND CLASS III:**

- 8:15 - 9:00 a.m. Arrival / Playground / Outdoor Start
- 9:00 - 9:20 a.m. Morning Meeting
- 9:20 - 10:00 a.m. Choice Time / Learning Centers
- 10:00 - 10:10 a.m. Clean up / Bathroom
- 10:10 - 10:30 a.m. Snack (outside weather permitting)

10:30 - 10:45 a.m. Head for an Adventure site

10:45 - 11:00 a.m. Circle/ Group Story / Writing / Quiet Time

11:00 - 12:00 p.m. Outdoor Adventure / Playground / Carpool -

In unfavorable weather, the inside time is lengthened, so we have more time to learn and engage in movement activities.

### **TYPICAL SCHEDULE FOR CLASS III FULL DAYS (M/T/Th):**

12:15 p.m. Lunch (outside water permitting)

12:45 p.m. Meeting (math, literacy, story activity, movement activity, etc.)

1:15 p.m. Choice or adventure

2:10 p.m. Cleanup

2:30 p.m. Dismissal

### **GENERAL SCHEDULE NOTATIONS**

- **Class III** schedule is Mondays, Tuesdays, and Thursdays until 2:30 p.m. and Wednesdays and Fridays until noon.
- **"Sportsjam"** is organized outdoor games with Jeremy Aron and will be available to all classes on a rotating basis in the mornings.
- **"Animal Care"** is a class with Jeremy Aron that is available to all children on a rotating basis in the mornings.
- **Music** - Classes have focused sessions twice weekly with John Farrington.
- **School assemblies / sing-alongs occur on holidays such as Thanksgiving and other special days**, such as before winter and spring breaks and the last day of school. Schedules may change depending on the weather and children's interests.