BREAKTHROUGH MONTESSORI LEARNING GOALS

Our vision is for students to matriculate from our school with the ability to develop within themselves the power to shape their lives and the world around them. We believe that strong academic skills in all areas afford children the opportunity to seek knowledge and use that knowledge to make good decisions for their own lives and in society.

This document details the learning goals for what students should know and be able to do upon completing each level (primary, lower elementary, and upper elementary). We meet these learning goals through implementation of the Montessori curriculum.

ENGLISH LANGUAGE ARTS (ELA)/LITERACY

Primary (PK3-K)	Lower Elementary (1-3)	Upper Elementary (4-6)	
Write simple sentences independently, directly on paper	Complete, write, and present research on topics of interest	Integrate new vocabulary words into everyday speech	Use context clues to determine unknown vocabulary
Use key phonograms in writing and reading, applying phonics knowledge to create plausible spellings	Write essays in response to prompts, referencing evidence from texts	Share news or tell a story in proper sequence	Write a grammatically correct sentence
Rhyme, clap syllables, and count words in a sentence	Write in different genres such as formal and informal letters, narrative fiction, and poetry	Engage in a discussion about literature	Write a five paragraph essay with an introduction and conclusion
Read puzzle words, sight words, and high frequency words	Use legible handwriting	Summarize information given orally and asks follow up questions	Edit own text for capitals, punctuation, and spelling
Read fluently and comprehend decodable books (including phonograms, blends, silent E, and sight words, with at least one complete sentence per page)	Spell high-frequency words correctly uses recognizable spelling patterns for misspelled words	Deliver a prepared oral presentation	Writes a friendly letter, book report and a nonfiction essay

Identify all parts of speech and corresponding grammar symbols	Read aloud with fluency	Use effectively all research skills
Identify subject, predicate and direct object	Select a book at an appropriate level independently	Identify types of poetry (haiku, epic, sonnet, etc.)
Read fluently and can answer inferential questions about middle-grade novels	Read independently for 30 minutes uninterrupted	Identify and use the basic elements of poetry (alliteration, similes, metaphors, and rhyme)
	Extract pertinent information from a text	Use word processing skills to type up a report
	Find the main idea, characters, setting, plot, theme	Use toolbar function to format text for font size and style and double spacing lines
	Summarize who, what, when, where, and why from a fiction text	Apply spelling rules to unfamiliar words
	Cite specific examples to support an answer	Spell common homophones correctly in their writing
	Take notes from text	Edit written work identifying misspelled words and corrects them using resources
	Explain plagiarism and avoid it	Identify the subject, predicate, direct object, indirect object, and modifiers of a sentence
	List and defines five genres of text	Identify types of sentences
	Differentiate between fact and opinion in text	

MATH

Primary (PK3-K)	Lower Elementary (1-3)	Upper Elementary (4-6)	
Identify and understands the value of teens and tens and has concept of place value	Read any number with accurate place value into the millions	Demonstrate mastery of four operations using multi-digit numbers with integers	Find the line of symmetry
Transition to tens and hundreds with ease when counting	Solve equations with at least 4 digit numbers using the four operations without material	Demonstrate mastery of addition and subtraction of unlike fractions and mixed numbers	Name types of triangles, types of polygons and solid geometric figures
Read any number with accurate place value into the thousands	Memorize addition facts	Demonstrate mastery of all operations with decimals	Define congruent, similar, equivalent, variable, equation, factor, multiple, and quotient
Form quantities of the decimal system using beads and symbols	Memorize subtraction facts	Round to compatible numbers	Demonstrate mastery of the order of operations
Understand the rules of the decimal system: knows and applies the rules of exchanging between the hierarchies	Memorize multiplication facts	Utilize estimation strategies across mathematical applications	Solve single step equations with one variable
Understand the nature of the four basic operations	Identify equivalent fractions	Find common equivalent fractions, decimals and percents	Calculate mean, median, mode, range
Work with the combinations in addition, subtraction and multiplication	Add and subtract fractions with like denominators	Understand number concepts such as primes, least common multiple, and divisibility	Interpret graphs, charts, and tables
Memorize the addition combinations up to ten	Read the clock to the minute	Calculate the area for squares and rectangles	Complete all operations with money
Read the clock to the hour	Identify the value of coins and make change for a dollar	Understand the concepts of congruence, similarity, equivalence	Use mathematical operations to calculate elapsed time
Solve simple word problems	Read and solve multi-step word problems	Name and measure angles	

Identify by name some of the shapes of the geometry cabinet & geometric solids	Verbalize and explain own mathematical reasoning	Decipher and solve single-step word problems with whole numbers using operations	
	Name plane and solid geometric shapes	Use measurement tools for length, temperature, and weight	

SCIENCE

Primary (PK3-K)	Lower Elementary (1-3)	Upper Elementary (4-6)
Be familiar with the external parts of the five major classes of vertebrates	Be familiar with the process for the formation of the universe and of the earth	Understand and apply the scientific method in a developmentally appropriate manner
Be familiar with and identify different leaf shapes by their scientific names	Be familiar with the external and internal parts of the five major classes of vertebrates	Understand plate tectonics and the different ways mountains are formed
Be familiar with the needs of plants	Be familiar with the states of matter and their characteristics, as well as different ways of combining liquids, solids, and gases	Understand the movement of wind and its effect on earth
Identify land and water forms	Be familiar with the systems of the human body, their function, and nomenclature	Classify plants by the shape, size, and other characteristics of its vegetative and reproductive parts, including familiarity with the scientific terminology for each part (e.g. obovate leaf shape, toothed leaf margin, adventitious root, bilateral perianth)
Know the names of the continents and some countries	Understand the needs of plants	Sort animals of Kingdom Animalia by kingdom and phylum
Be familiar with the life cycle of the butterfly	Understand the function of the vegetative and reproductive plant parts (leaf, root, stem, flower, fruit seed)	Be familiar with other kingdoms of living organisms and their characteristics
Sort living and nonliving objects	Familiarity with different land and water forms and their nomenclature, as well as common examples of geographic features on different continents	Be familiar with the movements of air and their effects, such as insulation, seasonal rain, ocean currents, and wind erosion

Sort objects by quality, such as objects that sink and objects that float	Understand the relationship between the sun and the earth and the effects of that relationship (seasons, temperature patterns, time zones, etc.)	Be familiar with the movements of water and their effects, such as the water cycle, sedimentation, and erosion
Engage in simple experiments around and be familiar with properties such as magnetism, gravity, capillary action, states of matter, etc.	Be familiar with the different eras since the start of life on earth (paleozoic, cenozoic, etc.) and some of the animals and plants from each	Be familiar with the interdependent relationship between humans, animals, and plants on the earth, including economic geography work
Observe flora and fauna and share their observations verbally or in written form		Be familiar with the layers of the earth, their names, characteristics, and relative size, including work with concepts such as plate tectonics and isostatic balance
Have a rich sensorial vocabulary for observing and comparing color, weight, size, texture, smell, and taste		