



**echo**  
HORIZON  
s c h o o l  
Pre K-6

**BENCHMARKS**  
**Language Arts**  
**and Math**

## Mission Statement

The mission of Echo Horizon School and its Echo Center is to educate children in a collaborative environment that is academically challenging and developmentally appropriate. We actively promote mutual respect, individual responsibility, and ethical action. The Echo Horizon graduate is an inquisitive and critical thinker who brings creativity, kindness, and self-reliance to the lifelong journey of learning.

## Teaching & Learning

Echo Horizon School utilizes a co-teaching model where credentialed classroom and DHH teachers collaborate to plan a curriculum that engages students. Students are grouped flexibly so that they have opportunities to work with all teachers and amongst a variety of their peers. Through project-based learning and thematic integrated units, students learn important academic and critical thinking skills while also gaining confidence in communication, collaboration, creativity, and problem solving.

## Our Educational Approach

At Echo Horizon School, we value character education as highly as we do academic rigor. We believe that the education, care, and nurturing of the elementary-age child is best accomplished in our Pre-K to 6<sup>th</sup> grade setting. Nationally recognized for our ability to leverage technology that optimizes and creates multi-dimensional learning, Echo Horizon's teaching emphasizes character education to facilitate social and emotional growth, critical thinking, autonomy, resilience, and social responsibility.

## Educational Excellence

Echo Horizon has been recognized as an **Apple Distinguished School** for innovation, leadership, and educational excellence. Technology is seamlessly integrated into the learning environment from Pre-K to 6<sup>th</sup> grade at an age-appropriate level. Students have better than 1:1 access to laptops and iPads, which they use regularly to explore concepts, communicate locally and globally, and express their learning in dynamic digital formats. Experiences in the Arts and the physical world are equally valued as students have opportunities to choreograph dances, compose music, dress up as historical figures, play in the sandbox, and read books in our beautiful library. All these experiences prepare our students for success in the 21st century.

## Our Core Values

Since our founding in 1983, we have developed a balanced and dynamic approach to education by fostering a warm, nurturing environment, providing a rigorous academic foundation, and emphasizing our core values of mutual respect, inclusiveness, self-reliance, and best educational practices. To promote inquiry and innovation, we provide the necessary opportunities for students to explore, discover,

and create. We place a strong emphasis on ethical behavior and appreciation for diversity, creating a warm, heterogeneous community that fosters open-minded thinking and tolerance. Our students learn to be independent as they take advantage of opportunities to make choices and decisions. The fact that 10% of our children are deaf or hard of hearing (DHH) has a profound and positive impact on all Echo Horizon School students when it comes to acceptance and appreciation of differences in others.

## Inquiry & Innovation

Echo Horizon's **i2** time was inspired by Google's "20% time" model. In the Centers of Inquiry and Innovation, student learning is inquiry-based, reflective, collaborative, process-oriented, and passion-driven. Students participate in innovative, creative time in the Centers on a weekly basis. Younger students in Pre-K to 2<sup>nd</sup> grades engage in exploration to develop skills in discovery, early research, collaboration, and implementation and sharing of ideas. Students in 3<sup>rd</sup> to 6<sup>th</sup> grades design a project with a teacher-mentor that culminates in a TED-style talk reflecting on their process.

# Math

At the end of his/her current grade level, your child should be able to...

	NUMBER SENSE & OPERATIONS	OPERATIONS & ALGEBRAIC THINKING	MEASUREMENT & DATA	GEOMETRY
PRE-K	<ul style="list-style-type: none"> <li>Count with one-to-one correspondence, using concrete objects and pictures, at least up to ten</li> <li>Match a numeral to a quantity, at least up to five</li> <li>Represent a number of objects with a written numeral, at least up to five</li> <li>Compare sets of objects, at least up to ten, and identify which group has more or less</li> <li>Demonstrate familiarity with a five-frame and a ten-frame</li> </ul>	<ul style="list-style-type: none"> <li>Identify, sort, and classify objects or pictures into three groups using one attribute</li> <li>Identify, extend, and create a simple repeating pattern</li> </ul>	<ul style="list-style-type: none"> <li>Understand that various tools are used in standard measurement, such as a ruler, cup, or scale</li> <li>Measure objects using nonstandard units, such as blocks</li> <li>Compare objects using measurement-related adjectives, such as longer, taller, or heavier</li> <li>Understand that various tools are used to measure time, such as a calendar, a clock, or an hourglass</li> <li>Use simple picture graphs</li> </ul>	<ul style="list-style-type: none"> <li>Recognize and name basic geometric shapes</li> <li>Identify basic geometric shapes in the environment</li> <li>Combine basic geometric shapes to make other shapes, pictures, or construction</li> </ul>
KINDERGARTEN	<ul style="list-style-type: none"> <li>Compare two or more sets of objects and identify size comparisons</li> <li>Recognize, name, and order objects up to 30</li> <li>Use concrete objects to show answers to addition and subtraction problems</li> <li>Use estimation strategies in computation and problem solving</li> <li>Compose and decompose numbers from 11 to 19 into tens and ones and begin building equations</li> </ul>	<ul style="list-style-type: none"> <li>Represent addition and subtraction with objects, fingers, mental images, or expressions</li> <li>Decompose numbers less than ten into multiple equation pairs</li> <li>Set up a math problem by determining the approach, materials, and strategies needed and explain the reasoning used with concrete objects and/or pictorial representations</li> </ul>	<ul style="list-style-type: none"> <li>Identify time of everyday events (to the nearest hour)</li> <li>Make precise calculations and check the validity of the results in the context of the problem</li> </ul>	<ul style="list-style-type: none"> <li>Identify common objects and describe their common geometric features</li> <li>Identify, describe, and extend simple patterns by referring to their shapes, sizes, or colors</li> <li>Identify, sort, and classify objects by attribute and point out which object does not belong to a particular group</li> </ul>
FIRST GRADE	<ul style="list-style-type: none"> <li>Perform basic multiplication and division problems</li> <li>Count to 100</li> <li>Understand halves and fourths fractions</li> <li>Add and subtract within 100</li> <li>Make reasonable estimates up to 100</li> </ul>	<ul style="list-style-type: none"> <li>Recognize equal groups and find sums in a collection of groups by repeated addition</li> <li>Write number sentences for multiplication stories</li> <li>Illustrate the sharing and grouping concepts of division</li> <li>Use symbols to signify greater than and less than</li> </ul>	<ul style="list-style-type: none"> <li>Tell time to the hour and half hour and begin to sequence events</li> <li>Tell time using both digital and analog clocks</li> <li>Represent and interpret data using picture and bar graphs and tally marks</li> </ul>	<ul style="list-style-type: none"> <li>Distinguish between defining attributes and non-defining attributes</li> <li>Create two and three dimensional shapes</li> <li>Order and compare lengths of three objects</li> <li>Express the length of objects utilizing standard and nonstandard measurement tools</li> </ul>
SECOND GRADE	<ul style="list-style-type: none"> <li>Understand the concept of division with remainders</li> <li>Understand the concept of fractions of a set</li> <li>Fluently add and subtract within 20 using mental strategies</li> <li>Recite from memory all sums of two one-digit numbers</li> </ul>	<ul style="list-style-type: none"> <li>Display a more advanced understanding of the "part, part of whole" concept as applied to addition and subtraction of whole numbers</li> <li>Exhibit greater independence in using the bar model method to solve math operations</li> </ul>	<ul style="list-style-type: none"> <li>Add sums of money with differing amounts of dollars and coins</li> <li>Solve word problems involving different denominations of money</li> <li>Solve word problems involving elapsed time and use graphs to represent data</li> </ul>	<ul style="list-style-type: none"> <li>Partition shapes into equal shares and describe shares using fractions</li> <li>Recognize and draw shapes having specified attributes</li> <li>Identify triangles, quadrilaterals, pentagons, hexagons, and cubes</li> </ul>

## THIRD GRADE

- Recognize and generate simple fraction equivalents
- Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers
- Compare fractions with the same numerator or denominator by reasoning about their size

- Identify arithmetic patterns and explain them using properties of operations
- Solve two-step word problems using the four operations
- Fluently multiply and divide within 100
- Interpret products and quotients of whole numbers
- Use multiplication and division within 100 to solve word problems

- Measure and estimate liquid volumes and masses of objects using standard units
- Add, subtract, multiply, or divide to solve word problems involving masses or volumes
- Identify and write time to the nearest minute and measure time intervals in minutes
- Solve real-world problems involving perimeters of polygons

- Understand that shapes in different categories may share attributes that can define a larger category
- Recognize rhombuses, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories

## FOURTH GRADE

- Read and write multi-digit numbers using base-ten numerals, number names, and expanded form
- Fluently add and subtract multi-digit whole numbers using the standard algorithm
- Use place value understanding to round multi-digit whole numbers
- Add and subtract mixed numbers with like denominators
- Compare two fractions with different numerators and different denominators by using visual fraction models
- Compare and round decimals

- Create line graphs using linear functions
- Use algebraic equations to create input-output charts with variables
- Solve multi-step word problems involving multiplication and division
- Assess the practicality of answers using mental computation and estimation strategies including rounding

- Use all four operations to solve word problems involving distances, intervals of time, masses of objects, and money
- Represent measurement quantities using diagrams that feature scales
- Solve problems involving addition and subtraction of fractions using line plots
- Apply the area and perimeter formulas of rectangles to real-world problems
- Find the area and perimeter of composite figures using lengths of certain given sides

- Classify two-dimensional figures based on the presence of parallel or perpendicular lines and angles
- Recognize and identify right triangles as a category
- Identify elements of a circle, including diameter and radius
- Identify solid figures based on faces, edges, and vertices
- Identify line-symmetric figures and draw lines of symmetry

## FIFTH GRADE

- Read, write, and compare whole numbers up to the billions
- Represent numbers from thousandths and billionths place using expanded notation
- Add, subtract, multiply, and divide decimals to the thousandths place
- Make equivalent fractions using LCD
- Convert between mixed numbers and improper fractions
- Convert fractions to decimals, decimals to percentages, percentages to fractions, and determine a percent of a quantity
- Multiply and divide fractions by whole numbers

- List factors of a given number, categorize as a prime or a composite, and represent in prime factorization
- Identify a square number
- Write and evaluate numerical expressions involving whole-number exponents
- Use parentheses and/or brackets in numerical expressions and evaluate expressions with these symbols
- Translate word-based directions into numerical expressions

- Use ratio language to describe a relationship between two or more quantities
- Find mean, median, mode, and range of a given data set
- Determine and create the most appropriate graph for a given data set
- Analyze data represented in the form of a line plot, histogram, and circle graph

- Determine the area of a triangle, a parallelogram, and a composite figure
- Identify the properties of prisms and pyramids
- Find volume of rectangular prisms
- Sketch and measure angles using a protractor
- Classify triangles based on sides and/or angles
- Find missing angle measures on a line, in a triangle, and in a quadrilateral based on the sum of angles' properties

## SIXTH GRADE

- Write and evaluate numerical expressions involving whole-number exponents
- Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane
- Identify the absolute value of a number
- Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation
- Calculate a missing percent
- Find the percent of a number in context of tip, tax, and income tax

- Translate word sentences into mathematical expressions
- Solve numerical expressions using order of operations
- Read, write, and evaluate expressions that have letters representing numbers
- Evaluate algebraic expressions given a value for a specified variable
- Translate real-world situations into algebraic expressions and equations
- Plot pairs of integers on a coordinate plane

- Display collected data on a line plot and step-and-leaf plot
- Identify statistical landmarks of a data set and identify patterns and outliers within the set

- Find unknown angles using properties of polygons
- Find unknown angles using knowledge of complementary, supplementary, vertical, alternate interior, alternate exterior, and corresponding angles
- Find the area of compound shapes by decomposing them into rectangles, parallelograms, and triangles
- Determine the circumference and area of a circle and the perimeter of  $\frac{1}{2}$  and  $\frac{1}{4}$  of a circle
- Find the volume and surface area of triangular prisms and cylinders

# Language Arts

At the end of his/her current grade level, your child should be able to...

READING	WRITING	SPEAKING & LISTENING	LANGUAGE	
<ul style="list-style-type: none"> <li>Recall information in stories and texts that are read to him/her</li> <li>Give thoughtful responses to questions about stories and texts</li> <li>Recognize and name upper case letters of the alphabet</li> <li>Recognize and generate at least ten letter sounds</li> <li>Understand that letters of the alphabet are symbols used to make words</li> <li>Recognize his/her own name in print, as well as the names of some of his/her friends</li> </ul>	<ul style="list-style-type: none"> <li>Independently print his/her first name using upper case letters</li> <li>Print all upper case letters using a model</li> <li>Print at least half of the upper case letters independently, without a model</li> <li>Generate and dictate ideas for his/her journal and other work</li> <li>Copy simple words to accompany his/her work and play</li> <li>Print from left to right</li> </ul>	<ul style="list-style-type: none"> <li>Speak with appropriate tone and volume for situation</li> <li>Listen and respond to speaker with appropriate answer, comment, or question</li> <li>Listen to others in a group</li> <li>Speak on topic during group discussions, with support</li> <li>Understand and follow three-part oral directions</li> </ul>	<ul style="list-style-type: none"> <li>Use language and social skills, such as eye contact and using another's name, to meet needs</li> <li>Understand and use category names, such as vehicles, clothing, or vegetables</li> <li>Use directional prepositions, such as over, under, between, or beside</li> <li>Demonstrate growth in vocabulary</li> </ul>	PRE-K
<ul style="list-style-type: none"> <li>Recognize and produce rhyming words</li> <li>Use pictures and titles to make predictions about text</li> <li>Understand that words are read from left to right on the page</li> <li>Identify characters and major events in a story</li> <li>Identify main topic, key details, and basic similarities and differences between two texts (with prompting and support)</li> <li>Recognize and name all upper case and lower case letters of the alphabet</li> <li>Count, pronounce, blend, and segment syllables in spoken words, and identify long and short sounds of each vowel</li> </ul>	<ul style="list-style-type: none"> <li>Use a combination of drawing, dictation, and writing to compose stories</li> <li>Blend two to three phonemes into recognizable words</li> </ul>	<ul style="list-style-type: none"> <li>Continue a conversation through multiple exchanges</li> <li>Demonstrate understanding of text read aloud or information presented through media by answering questions</li> <li>Use eye contact as a listening and speaking skill to focus attention on speaker and connect to listeners</li> <li>Ask and answer questions in order to seek help, obtain information, or clarify what is not understood</li> </ul>	<ul style="list-style-type: none"> <li>Form regular plural nouns orally (with support)</li> <li>Understand and use question words (who, what, where, when, why)</li> <li>Capitalize the pronoun "I" and the first word in a sentence</li> <li>Spell simple words phonetically</li> <li>Use most frequently occurring prepositions (in, out, on, off, by, with)</li> <li>Use words and phrases acquired through conversations and reading</li> </ul>	KINDERGARTEN
<ul style="list-style-type: none"> <li>Retell stories, including key details, and demonstrate understanding of central message or lesson</li> <li>Read prose and poetry at grade level, both silently and orally</li> <li>Use context to confirm or self-correct word recognition and understanding</li> <li>Describe the connection between two individuals, events, ideas, or pieces of information in a text</li> </ul>	<ul style="list-style-type: none"> <li>Write narratives that accurately recount two or more sequenced events</li> <li>Write opinion pieces that introduce a topic, state an opinion with reasoning, and provide closure</li> <li>Write informative pieces that name a topic, supply facts, and provide closure</li> <li>Participate in shared research and writing projects</li> </ul>	<ul style="list-style-type: none"> <li>Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly</li> <li>Participate in, and follow agreed-upon rules for, discussions</li> <li>Build upon others' talk in conversations</li> <li>Ask questions to clear up any confusion about the topics and texts under discussion</li> <li>Ask and answer questions about key details in text read aloud, or information presented through media</li> </ul>	<ul style="list-style-type: none"> <li>Use determiners and common, proper, and progressive nouns</li> <li>Use personal, possessive, and indefinite pronouns</li> <li>Use frequently occurring conjunctions</li> <li>Produce and expand complete, simple, and compound declarative, interrogative, imperative, and exclamatory sentences in response to a prompt</li> <li>Use sentence-level context as a clue to the meaning of a word or phrase</li> <li>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing</li> <li>Identify root words and their inflection forms</li> <li>Demonstrate shades of meaning among verbs differing in manner and adjectives differing in intensity</li> </ul>	FIRST GRADE
<ul style="list-style-type: none"> <li>Identify rhythm and meaning in poems described by words and phrases</li> <li>Describe the connection between a series of historical events, scientific concepts, or technical procedures</li> <li>Describe how characters respond to events and use different voices when reading out loud to describe how a character is feeling</li> <li>Compare and contrast two or more versions of the same story</li> <li>Use information from illustrations to understand what is being read</li> </ul>	<ul style="list-style-type: none"> <li>Generate a fiction story about some place in the world</li> <li>Write adventure stories, folktales, biographies, autobiographies, and non-fiction text</li> <li>Write a personal response to a poem</li> </ul>	<ul style="list-style-type: none"> <li>Participate in collaborative conversation about grade-appropriate topics</li> <li>Tell a story using appropriate facts and details</li> <li>Form and use irregular plural nouns</li> <li>Use reflexive pronouns</li> <li>Form and use past tense of frequently occurring irregular verbs</li> </ul>	<ul style="list-style-type: none"> <li>Rearrange simple and compound sentences</li> <li>Demonstrate understanding of figurative language and word relationships</li> <li>Use words and phrases acquired through conversations</li> <li>Determine meaning of unknown and multi-media words based on content</li> <li>Understand prefixes, root words, and compound words</li> <li>Consult reference materials to check word meaning and spelling</li> <li>Identify real-life connections between words and their use</li> </ul>	SECOND GRADE

<ul style="list-style-type: none"> <li>Describe the relationship between a series of events using language that pertains to time, sequence, and cause/effect</li> <li>Write, routinely and over time, frames for a range of discipline-specific tasks, purposes, and audiences</li> <li>Use information gained from illustrations and words in a text to demonstrate understanding</li> <li>Independently and proficiently read and comprehend informational texts, including history, science, and technical</li> </ul>	<ul style="list-style-type: none"> <li>Introduce a topic and develop it with facts, definitions, and details</li> <li>Recall information from experiences through brief notes</li> <li>Use linking words and phrases to connect opinion and reason, and ideas within categories of information</li> <li>Use dialogue and description of actions, thoughts, and feelings to develop experiences and show response of characters to situations</li> <li>Use temporal words and phrases to signal event order</li> </ul>	<ul style="list-style-type: none"> <li>Report on a topic or text, tell a story, or recount an experience with appropriate facts and descriptive details</li> <li>Express and articulate thoughts and ideas to demonstrate learning based on written texts</li> <li>Produce audio recordings of original poems and present to an audience</li> <li>Determine the main ideas and supporting details of a text read aloud or information presented in diverse media formats</li> <li>Explain his/her own ideas and understanding by speaking in complete sentences and providing requested detail or clarification</li> </ul>	<ul style="list-style-type: none"> <li>Explain the functions of nouns, pronouns, verbs, adjectives, and adverbs</li> <li>Form and use regular and irregular plural nouns and verbs</li> <li>Use appropriate punctuation in addresses and dialogues</li> <li>Form and use possessives</li> <li>Form and use comparative and superlative adjectives and adverbs</li> <li>Use coordinating and subordinating conjunctions</li> <li>Distinguish between literal and nonliteral meanings of words and phrases in context</li> <li>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings</li> </ul>	THIRD GRADE
<ul style="list-style-type: none"> <li>Independently identify underlying details and make inferences from end of grade level literature-themed books</li> <li>Identify main idea and details for a novel and write a four-paragraph summary using topic and conclusion sentences</li> <li>Make connections based on text to world at large</li> <li>Develop a monologue script paraphrased from non-fiction based text</li> <li>Show knowledge of word patterns, root words, and syllabication</li> <li>Define words based on content</li> <li>Read fluently and comprehend end of grade level literature books</li> </ul>	<ul style="list-style-type: none"> <li>Write a four to five-paragraph personal narrative that identifies characters, setting, conflict, and solution</li> <li>Generate student questions and define key concepts to incorporate into a five-paragraph essay using a thesis statement</li> <li>Identify differences and similarities between a text and a movie and write a four-paragraph essay with topic, conclusion sentences, and details to support</li> </ul>	<ul style="list-style-type: none"> <li>Contribute to group literature discussion questions</li> <li>Listen to peers in a group setting and make appropriate responses through inferences and asking, developing, and answering higher level thinking questions</li> </ul>	<ul style="list-style-type: none"> <li>Utilize accurate grammar conventions, including conjunctions, prepositions, interjections, verb tenses, and correlative conjunctions</li> <li>Determine the meanings of unknown and multiple-meaning words and phrases based on grade level content</li> </ul>	FOURTH GRADE
<ul style="list-style-type: none"> <li>Identify the reasons and evidence that the author uses to support his/her position</li> <li>Compare and contrast two or more characters, settings, or events in a story, and describe how the narrator's point of view influences how the events are described</li> <li>Read with sufficient accuracy and fluency to support comprehension</li> <li>Define and identify the five types of figurative language (simile, metaphor, personification, hyperbole, onomatopoeia)</li> <li>Summarize informational texts and use knowledge gained from multiple resources to write and speak knowledgeably about a subject</li> </ul>	<ul style="list-style-type: none"> <li>Write narratives to develop real or imagined experiences using effective technique, descriptive details, and clear event sequences</li> <li>Write opinion pieces on topics or texts, supporting a point of view with reasons and information</li> <li>Draw evidence from literary or informational texts to support analysis, reflection, and research</li> <li>Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach</li> <li>Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience</li> </ul>	<ul style="list-style-type: none"> <li>Summarize the points a speaker makes and explain how each claim is supported by reason and evidence</li> <li>Report on a topic, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main idea</li> <li>Include multimedia components and visual displays in presentations when appropriate to enhance the development of main ideas</li> <li>Engage effectively in collaborative literature discussions, building on others' ideas and clearly expressing his/her own ideas</li> </ul>	<ul style="list-style-type: none"> <li>Determine the meanings of unknown and multiple-meaning words and phrases based on grade level reading and content</li> <li>Identify synonyms, antonyms, and homographs</li> <li>Interpret the meanings of texts that utilize figurative language</li> </ul>	FIFTH GRADE
<ul style="list-style-type: none"> <li>Read and comprehend a variety of independent and assigned texts in grades 6-8 complexity band</li> <li>Consider figurative and connotative meanings of word choices, analyzing the impact of word choices on meaning and tone</li> <li>Cite textual evidence to support ideas and draw inferences</li> <li>Identify difference between first, second, and third person points of view</li> <li>Summarize a book-length text using a topic sentence and main ideas</li> <li>Demonstrate increasingly complex comprehension through discussion comments, responses to questions, and written assignments</li> </ul>	<ul style="list-style-type: none"> <li>Write routinely over extended time frames, allowing time for research, reflection, and revision</li> <li>Produce clear and coherent writing in which the development, organization, style, and tone are appropriate to task, purpose, and audience</li> <li>Choose the form of writing (report, narrative, poem, etc.) that best suits the intended purpose</li> <li>Conduct short research project to answer a question, drawing on several sources</li> <li>Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase data while providing basic bibliographic information for all sources</li> </ul>	<ul style="list-style-type: none"> <li>Initiate discussion through thoughtful preparation of material</li> <li>Pose and respond to specific questions with elaboration by making comments that move a topic forward</li> <li>Demonstrate understanding through reflection and paraphrasing</li> <li>Actively participate in teacher and peer-led discussions, following the conventions for constructive discussion</li> </ul>	<ul style="list-style-type: none"> <li>Use common, grade-level Greek/Latin roots as clues to the meaning of the word</li> <li>Distinguish between connotations (associations, feelings) and denotations (definitions) of words</li> <li>Use correct pronoun case (subjective, objective, possessive)</li> <li>Use correct subject/verb agreement and maintain consistency in verb tense</li> <li>Recognize and correct shifts in past and present verb tenses</li> </ul>	SIXTH GRADE