

Standard	Tools of the Mind Activity
ENGLISH LANGUAGE ARTS AND	LITERACY
Reading Standards for Literature	e Pre-K
MA.1. With prompting and support, ask and answer questions about a story or poem read aloud.	<ul> <li>Story Lab - Active Listening, Character Empathy, Connections, Extensions, Learning Facts, Predictions, Story Grammar, Vocabulary</li> <li>Fingerplays, Chants &amp; Songs</li> </ul>
MA.2. With prompting and support, retell a sequence of events from a story read aloud.	Story Lab- Story Grammar
MA.3. With prompting and support, act out characters and events from a story or poem read aloud.	<ul> <li>Story Lab- Story Grammar, Predictions and Inferences</li> <li>Fingerplays, Chants &amp; Songs</li> <li>Make-Believe Play Block</li> <li>Buddy Reading</li> </ul>
MA.4. With prompting and support, ask and answer questions about unfamiliar words in a story or poem read aloud.	<ul> <li>Story Lab - Active Listening, Character Empathy, Connections, Extensions, Learning Facts, Predictions, Story Grammar, Vocabulary</li> <li>Fingerplays, Chants &amp; Songs</li> </ul>
MA.6. With prompting and support, "read" the illustrations in a picture book by describing a character or place depicted, or by telling how a sequence of events unfolds.  MA.7. With prompting and support, make predictions about what happens next in a picture book after examining and discussing the illustrations.	<ul> <li>Buddy Reading</li> <li>Story Lab- Story Grammar, Predictions and Inferences</li> <li>Story Lab- Predictions</li> </ul>
MA.8.A. Respond with movement or clapping to a regular beat in poetry or song.	Fingerplays, Chants & Songs
MA.9. With prompting and support, make connections between a story or poem and one's own experiences.	<ul> <li>Story Lab- Connections</li> <li>Fingerplays, Chants &amp; Songs</li> <li>Share the News</li> </ul>
MA.10. Listen actively as an individual and as a member of a group to a variety of age-appropriate literature read aloud.	<ul> <li>Story Lab - Active Listening, Character Empathy, Connections, Extensions, Learning Facts, Predictions, Story Grammar, Vocabulary</li> <li>Make-Believe Play Building Background Knowledge</li> </ul>
Reading Standards: Foundational S	Skills Pre-K
<ul> <li>MA.1. With guidance and support, demonstrate understanding of the organization and basic features of printed and written text: books, words, letters, and the alphabet.</li> <li>MA.1.a. Handle books respectfully and appropriately, holding them right-side-up and turning pages one at a time from front to back.</li> <li>b. (Begins in kindergarten or when the individual child is ready)</li> <li>c. (Begins in kindergarten or when the individual child is ready)</li> <li>MA.1.d. Recognize and name some uppercase letters of the alphabet and the lowercase letters in one's own name.</li> </ul>	<ul> <li>Story Lab - Active Listening, Character Empathy, Connections, Extensions, Learning Facts, Predictions, Story Grammar, Vocabulary</li> <li>Buddy Reading</li> <li>Shared Scaffolded Writing- Message of the Day, Write a Familiar Finger play &amp; Write Along</li> <li>Individual Scaffolded Writing- Play Planning, Learning Facts Story Lab, Science Eyes, Story Extensions Story Lab, Venger Drawing</li> <li>I Have- Who Has Literacy Games- Names, Letters</li> </ul>



Standar	rd	Tools of the Mind Activity
	ENGLISH LANGUAGE ARTS AND	· · · · · · · · · · · · · · · · · · ·
	With guidance and support, demonstrate understanding of spoken words, syllables, and sounds (phonemes).  MA.2.a. With guidance and support, recognize and produce rhyming words (e.g., identify words that rhyme with /cat/ such as /bat/ and /sat/).  MA.2.b. With guidance and support, segment words in a simple sentence by clapping and naming the number of words in the sentence.  MA.2.c. Identify the initial sound of a spoken word and, with guidance and support, generate several other words that have the same initial sound.  d. (Begins in kindergarten or when the individual child is ready)  e. (Begins in kindergarten or when the individual child is ready)  Demonstrate beginning understanding of phonics and word analysis skills.  MA.3.a. Link an initial sound to a picture of an object that begins with that sound and, with guidance and support, to the corresponding printed letter (e.g., link the initial sound /b/ to a picture of a ball and, with support, to a printed or written "B").  b. (Begins in kindergarten or when the individual child is ready)  MA.3.c. Recognize one's own name and familiar common signs and labels (e.g., STOP).  d. (Begins in kindergarten or when the individual child is ready)	<ul> <li>Shared Scaffolded Writing- Message of the Day, Write a Familiar Fingerplay &amp; Write Along</li> <li>Individual Scaffolded Writing- Play Planning, Learning Facts Story Lab, Science Eyes, Story Extensions Story Lab, Venger Drawing</li> <li>Fingerplays, Chants &amp; Songs</li> <li>Rhyming Game</li> <li>Mystery Literacy Activities- Mystery Question, Mystery Letter, Mystery Word, Mystery Rhyme</li> <li>Shared Scaffolded Writing- Message of the Day, Write a Familiar Finger play &amp; Write Along</li> <li>Individual Scaffolded Writing- Play Planning, Learning Facts Story Lab, Science Eyes, Story Extensions Story Lab, Venger Drawing</li> <li>Mystery Literacy Activities- Mystery Question, Mystery Letter, Mystery Word</li> <li>Take-Away Sounds</li> <li>Elkonin Boxes I - II</li> </ul>
	Writing Standards Pre-k	
	Dictate words to express a preference or opinion about a topic (e.g., "I would like to go re station to see the truck and meet the firemen.").	<ul> <li>Make-Believe Play Planning</li> <li>Share the News</li> <li>Story Lab - Active Listening, Character Empathy, Connections, Extensions, Learning Facts, Predictions, Story Grammar, Vocabulary</li> </ul>
	Use a combination of dictating and drawing to explain information about a topic.	<ul> <li>Individual Scaffolded Writing- Play Planning, Learning Facts Story Lab, Science Eyes, Story Extensions Story Lab, Venger Drawing</li> <li>Shared Scaffolded Writing- Write Along</li> <li>Make-Believe Play Block</li> <li>Science Eyes</li> </ul>
MA.3.	Use a combination of dictating and drawing to tell a real or imagined story.	Individual Scaffolded Writing- Play Planning, Learning Facts Story Lab, Science Eyes, Story Extensions Story Lab, Venger Drawing
are used	Recognize that digital tools (e.g., computers, cell phones, cameras, and other devices) for communication and, with support and guidance, use them to convey messages in and/or words.	Technology may be incorporated during a variety of activities throughout a Tools of the Mind day including using iPads or computers to listen to/watch stories, conduct background-building research for the theme, and/or for a variety of Tools activities such as doing the Mystery Activities on a Smart Board.



Standard	Tools of the Mind Activity
ENGLISH LANGUAGE ARTS AND	LITERACY
Speaking and Listening Standa	
<ul> <li>MA.1. Participate in collaborative conversations with diverse partners during daily routines and play.</li> <li>MA.1.a. Observe and use appropriate ways of interacting in a group (e.g., taking turns in talking, listening to peers, waiting to speak until another person is finished talking, asking questions and waiting for an answer, gaining the floor in appropriate ways).</li> <li>MA.1.b. Continue a conversation through multiple exchanges.</li> </ul>	<ul> <li>Share the News</li> <li>Buddy Reading</li> <li>Story Lab - Active Listening, Character Empathy, Connections, Learning Facts, Predictions, Vocabulary</li> <li>Make-Believe Play Block</li> </ul>
MA.2. Recall information for short periods of time and retell, act out, or represent information from a text read aloud, a recording, or a video (e.g., watch a video about birds and their habitats and make drawings or constructions of birds and their nests).	<ul> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Practice</li> <li>Make-Believe Play Prop-Making</li> <li>Make-Believe Play Block</li> <li>Story Lab - Extensions, Learning Facts</li> <li>Pretend Transitions</li> </ul>
MA.3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	<ul> <li>Story Lab - Story Grammar, Vocabulary</li> <li>Mystery Literacy &amp; Math Activities</li> <li>Science Eyes &amp; Science Eyes Experiments</li> </ul>
MA.4. Describe personal experiences; tell real or imagined stories.	<ul><li> Share the News</li><li> Buddy Reading</li><li> Story Lab- Story Extensions</li></ul>
MA.5. Create representations of experiences or stories (e.g., drawings, constructions with blocks or other materials, clay models) and explain them to others.	<ul> <li>Individual Scaffolded Writing- Play Planning, Learning Facts Story Lab, Science Eyes, Science Eyes Experiments &amp; Journals, Story Extensions Story Lab, Venger Drawing</li> <li>Make-Believe Play Proptaking</li> <li>Make-Believe Play Block</li> </ul>
MA.6. Speak audibly and express thoughts, feelings, and ideas.	<ul> <li>Share the News</li> <li>Buddy Reading</li> <li>Story Lab - Active Listening, Character Empathy, Connections, Learning Facts, Predictions, Vocabulary</li> <li>Make-Believe Play Block</li> </ul>
Language Standards Pro	e-K
MA.1. Demonstrate use of oral language in informal everyday activities.  a. (Begins in kindergarten)  MA.1.b. Use frequently occurring nouns and verbs.  MA.1.c. Form regular plural nouns.  MA.1.d. Understand and use question words (e.g., who, what, where, when, why, how).  MA.1.e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off,	<ul> <li>Share the News</li> <li>Buddy Reading</li> <li>Story Lab - Active Listening, Character Empathy, Connections, Learning Facts, Predictions, Vocabulary</li> <li>Make-Believe Play Block</li> <li>Mystery Literacy &amp; Math Activities</li> </ul>



Standa	rd	Tools of the Mind Activity	
	ENGLISH LANGUAGE ARTS AND LITERACY		
	for, of, by, with).  MA.1.f. Demonstrate the ability to speak in complete sentences.  MA.1.g. Use vocabulary in the Massachusetts Curriculum Framework for  Mathematics pre-kindergarten standards to express concepts related to length, area, weight, capacity, and volume.	<ul> <li>Remember &amp; Replicate</li> <li>Making Collections</li> <li>Numerals Game</li> <li>Mystery Math Activities- Mystery Shape</li> <li>Science Eyes</li> </ul>	
MA.4.	Ask and answer questions about the meanings of new words and phrases introduced through books, activities, and play.  MA.4.a. With guidance and support, generate words that are similar in meaning (e.g., happy/glad, angry/mad).  b. (Begins in kindergarten)	<ul> <li>Story Lab - Character Empathy, Learning Facts, Vocabulary</li> <li>Make-Believe Play Block</li> <li>Make-Believe Play Building Background Knowledge</li> </ul>	
MA.5.	With guidance and support from adults, explore word relationships and nuances of word meanings.  MA.5.a. Demonstrate understanding of concepts by sorting common objects into categories (e.g., sort objects by color, shape, or texture).  b. (Begins in kindergarten)  MA.5.c. Apply words learned in classroom activities to real-life examples (e.g., name places in school that are fun, quiet, or noisy).  d.(Begins in kindergarten)	<ul> <li>Story Lab - Character Empathy, Learning Facts, Vocabulary</li> <li>Make-Believe Play Block</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Science Eyes</li> <li>Attribute Game</li> <li>Making Collections-Categories</li> </ul>	
MA.6.	Use words and phrases acquired through conversations, listening to books read aloud, activities, and play.	<ul> <li>Share the News</li> <li>Story Lab - Active Listening, Character Empathy, Connections, Extensions, Learning Facts, Predictions, Story Grammar, Vocabulary</li> <li>Make-Believe Play Block</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Pretend Transitions</li> </ul>	

Standard	Tools of the Mind Activity
<b>Mathematics</b>	
Counting and Cardinality	
MA.1. Listen to and say the names of numbers in meaningful contexts.	<ul> <li>Timeline Calendar</li> <li>Weather Graphing</li> <li>I Have-Who Has Math Games- Numerals</li> <li>Mystery Math Activities- Mystery Numeral</li> <li>Making Collections</li> <li>Numerals Game</li> <li>Number Line Hopscotch</li> </ul>



Standard	Tools of the Mind Activity
Mathematics	
MA.2 Recognize and name written numerals 0–10.	I Have- Who Has Math Games- Numerals     Mystery Math Activities- Mystery Numeral
	<ul> <li>Making Collections</li> <li>Numerals Game</li> <li>Number Line Hopscotch</li> </ul>
MA.3. Understand the relationships between numerals and quantities up to ten.	<ul> <li>Freeze Game-Freeze on the Number</li> <li>Making Collections</li> <li>Mystery Math Activities- Mystery Numeral</li> </ul>
MA.4. Count many kinds of concrete objects and actions up to ten, using one-to-one correspondence, and accurately count as many as seven things in a scattered configuration.	<ul> <li>Numerals Game</li> <li>Making Collections</li> <li>Mystery Math Activities- Mystery Numeral</li> <li>Numerals Game</li> <li>Number Follow the Leader</li> <li>Make-Believe Play</li> <li>Freeze Game- Freeze on the Number</li> </ul>
MA.5. Use comparative language, such as <i>more/less than, equal to,</i> to compare and describe collections of objects.	<ul> <li>Making Collections</li> <li>Mystery Math Activities- Mystery Numeral</li> <li>Numerals Game</li> <li>Tallying</li> <li>Weather Graph</li> <li>Make-Believe Play Block</li> </ul>
Operations and Algebraic Th	inking
MA.1. Use concrete objects to model real-world addition (putting together) and subtraction (taking away) problems up through five.	<ul> <li>Mystery Math Activities- Mystery Numeral Two Card</li> <li>Tallying</li> <li>Make-Believe Play Block</li> </ul>
Measurement and Data	
MA.1. Recognize the attributes of length, area, weight, and capacity of everyday objects using appropriate vocabulary (e.g., <i>long, short, tall, heavy, light, big, small, wide, narrow</i> ).	<ul><li>Remember and Replicate</li><li>Math Memory</li><li>Make-Believe Play Block</li></ul>
MA.2. Compare the attributes of length and weight for two objects, including longer/shorter, same length; heavier/lighter, same weight; holds more/less, holds the same amount.	<ul><li>Science-Eyes (with experiments)</li><li>Make-Believe Play Block</li></ul>
MA.3. Sort, categorize, and classify objects by more than one attribute.	Attribute Game     Make-Believe Play Block
MA.4. Recognize that certain objects are coins and that dollars and coins represent money.	<ul> <li>Story Lab- Learning Facts</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> </ul>



Standard	Tools of the Mind Activity
Mathematics	
Geometry	
MA.1. Identify relative positions of objects in space, and use appropriate language (e.g.,	Remember and Replicate
beside, inside, next to, close to, above, below, apart).	Math Memory
	Venger Drawing & Venger Collage
MA.2. Identify various two-dimensional shapes using appropriate language.	Story Lab- Learning Facts
	I Have-Who Has Math Activities- Shapes
	Math Memory
	Mystery Math Activities- Mystery Shape
	Venger Drawing & Venger Collage
MA.3. Create and represent three-dimensional shapes (ball/sphere, square box/cube,	Remember and Replicate
tube/cylinder) using various manipulative materials (such as popsicle sticks, blocks, pipe	Make-Believe Play: Prop Making
cleaners, pattern blocks).	Make-Believe Play Block

Standard	Tools of the Mind Activity
History and Social Science	
Pre-Kindergarten and Kindergarten	
Living, Learning, and Working T	'ogether
History and Geography	
PreK-K.1 Identify and describe the events or people celebrated during United States national	Timeline Calendar
holidays and why we celebrate them.	Story Labs- Learning Facts, Active Listening
	Make- Believe Play-Building Background Knowledge
a. Columbus Day	Make-Believe Play Block
b. Independence Day	·
c. Martin Luther King, Jr. Day	
d. Presidents' Day	
e. Thanksgiving	
PreK-K.2 Put events in their own and their families' lives in temporal order.	Share the News
	Timeline Calendar
	Classroom Practices-Daily Schedule
	Story Lab- Story Grammar
PreK-K.3 Identify the student's street address, city or town, and Massachusetts as the state and	Story Lab- Connections, Learning Facts
the United States as the country in which he or she lives. Identify the name of the student's	Community-Building Activities
school and the city or town in which it is located.	
PreK-K.4 Describe the location and features of places in the immediate neighborhood of the	Share the News
student's home or school.	Story Lab- Connections, Learning Facts
	Make-Believe Play Building Background Knowledge

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Standard	Tools of the Mind Activity
<b>History and Social Scienc</b> Pre-Kindergarten and Kinderga Living, Learning, and Working T	arten
Civics and Government	
PreK-K.5 Retell stories that illustrate honesty, courage, friendship, respect, responsibility, and the wise or judicious exercise of authority, and explain how the characters in the stories show these qualities.	Story Labs- Connections, Character Empathy, Predictions, Inferences
PreK-K.6 Identify and describe family or community members who promote the welfare and safety of children and adults.	<ul> <li>Story Labs- Connections, Learning Facts</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play</li> </ul>
PreK-K.7 Demonstrate understanding that there are important American symbols by identifying A. the American flag and its colors and shapes B. the melody of the national anthem C. the picture and name of the current president D. the words of the Pledge of Allegiance.	<ul> <li>Story Lab- Learning Facts</li> <li>Fingerplays, Chants, Songs</li> <li>Classroom Practices-Daily Schedule</li> </ul>
Economics	
PreK-K.8 Give examples of different kinds of jobs that people do, including the work they do at home.	<ul> <li>Story Lab- Learning Facts</li> <li>Share the News</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> </ul>
PreK-K.9 Explain why people work (e.g., to earn money in order to buy things they want).	<ul> <li>Story Lab- Learning Facts</li> <li>Share the News</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> </ul>
PreK-K.10 Give examples of the things that people buy with the money they earn.	<ul> <li>Story Lab- Learning Facts</li> <li>Share the News</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> </ul>



Standard	Tools of the Mind Activity
Science and Technology/ Engir	neering
Pre-K: Earth and Space Scio	ences
ESS1. Earth's Place in the Universe	
PreK-ESS1-1 (MA). Demonstrate awareness that the moon can be seen in the daytime and at night, and of the different apparent shapes of the moon over a month.  Clarification Statement: The names of moon phases or sequencing of moon phases is not expected.	<ul> <li>Story Lab- Learning Facts</li> <li>I Have-Who Has Math Games- Shapes</li> <li>Make-Believe Play Block</li> <li>Science-Eyes- Science Eyes Experiments</li> </ul>
PreK-ESS1-2 (MA). Observe and use evidence to describe that the sun is in different places in the sky during the day.	<ul> <li>Story Lab- Learning Facts</li> <li>I Have-Who Has Math Games- Shapes</li> <li>Make-Believe Play Block</li> <li>Science Eyes – Science Eyes Experiments</li> </ul>
ESS2. Earth's Systems	
PreK-ESS2-1 (MA). Raise questions and engage in discussions about how different types of local environments (including water) provide homes for different kinds of living things.	<ul> <li>Story Lab- Active Listening, Learning Facts</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> <li>Science Eyes, Science Eyes- Experiments</li> <li>Making Collections Categories</li> </ul>
PreK-ESS2-2 (MA). Observe and classify non-living materials, natural and human made, in their local environment.	Science Eyes, Science Eyes –Experiments
PreK-ESS2-3 (MA). Explore and describe different places water is found in the local environment.	<ul> <li>Story Lab- Active Listening, Learning Facts</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> <li>Science Eyes Experiments</li> </ul>
PreK-ESS2-4 (MA). Use simple instruments to collect and record data on elements of daily weather, including sun or clouds, wind, snow or rain, and higher or lower temperature.	Weather Graphing     Science Eyes Experiments, Science Eyes Journals
PreK-ESS2-5 (MA). Describe how local weather changes from day to day and over the seasons and recognize patterns in those changes.  Clarification Statement: Descriptions of the weather can include sunny, cloudy, rainy, warm, windy, and snowy.	<ul> <li>Weather Graphing</li> <li>Timeline Calendar</li> <li>Story Lab- Active Listening, Learning Facts</li> <li>Science Eyes Experiments</li> </ul>
PreK-ESS2-6 (MA). Provide examples of the impact of weather on living things. Clarification Statement: Make connections between the weather and what they wear and can do and the weather and the needs of plants and animals for water and shelter.	<ul> <li>Weather Graphing</li> <li>Timeline Calendar</li> <li>Story Lab- Active Listening, Learning Facts, Connections</li> <li>Science Eyes Experiments</li> </ul>
ESS3. Earth and Human Activity	
PreK-ESS3-1 (MA). Engage in discussion and raise questions using examples about local resources (including soil and water) humans use to meet their needs.	Story Lab- Active Listening, Learning Facts, Connections     Science Eyes Experiments
PreK-ESS3-2 (MA). Observe and discuss the impact of people's activities on the local environment.	Story Lab- Active Listening, Learning Facts, Connections

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Standard	Tools of the Mind Activity
Science and Technology/ Engin	neering
	Science Eyes Experiments     Make-Believe Play Building Background Knowledge
PreK: Life Science	
LS1. From Molecules to Organisms: Structures and Processes	
PreK-LS1-1 (MA). Compare, using descriptions and drawings, the external body parts of animals (including humans) and plants and explain functions of some of the observable body parts.  Clarification Statement: Examples can include comparison of humans having two legs and horses four, but both use legs to move.	<ul> <li>Story Lab- Active Listening, Learning Facts, Connections</li> <li>Share the News</li> <li>Science Eyes Experiments</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> </ul>
PreK-LS1-2 (MA). Explain that most animals have five senses they use to gather information about the world around them.	<ul> <li>Story Lab- Active Listening, Learning Facts, Connections</li> <li>Science Eyes Experiments, Science Eyes- Senses</li> <li>Make-Believe Play Building Background Knowledge</li> </ul>
PreK-LS1-3 (MA). Use their five senses in their exploration and play to gather information.	<ul> <li>Story Lab- Active Listening, Learning Facts, Connections</li> <li>Science Eyes Experiments, Science Eyes- Senses</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> </ul>
LS2. Ecosystems: Interactions, Energy, and Dynamics	
PreK-LS2-1 (MA). Use evidence from animals and plants to define several characteristics of living things that distinguish them from non-living things.	<ul><li>Story Lab- Learning Facts</li><li>Science Eyes - Experiments</li></ul>
PreK-LS2-2 (MA). Using evidence from the local environment explain how familiar plants and animals meet their needs where they live.  Clarification Statements:	<ul><li>Story Lab- Learning Facts</li><li>Science Eyes - Experiments</li></ul>
<ul> <li>Basic needs include water, food, air, shelter, and, for most plants, light.</li> <li>Examples of evidence can include squirrels gathering nuts for the winter and plants growing in the presence of sun and water.</li> <li>The local environment includes the area around the student's school, home, or adjacent community.</li> </ul>	
PreK-LS2-3 (MA). Give examples from the local environment of how animals and plants are dependent on one another to meet their basic needs.	Story Lab- Learning Facts, Connections     Science Eyes - Experiments
LS3. Variation of Traits	
PreK-LS3-1 (MA). Use observations to explain that young plants and animals are alike but not exactly like their parents.  Clarification Statement: Examples of observations include puppies that look similar but not exactly the same as their parents.	<ul> <li>Story Lab- Active Listening, Learning Facts, Connections</li> <li>Share the News</li> <li>Science Eyes - Experiments</li> <li>Make-Believe Play Building Background Knowledge</li> <li>Make-Believe Play Block</li> </ul>
PreK-LS3-2 (MA). Use observations to recognize differences and similarities among themselves and their friends.	<ul> <li>Story Lab- Active Listening, Learning Facts, Connections</li> <li>Share the News</li> <li>Community-Building Activities</li> </ul>



Standard	Tools of the Mind Activity
Science and Technology/ Engin	eering
PreK: Physical Sciences	
PS1. Matter and Its Interactions	
PreK-PS1-1 (MA). Raise questions and investigate the differences between liquids and solids and develop awareness that a liquid can become a solid and vice versa.  PreK-PS1-2 (MA). Investigate natural and human-made objects to describe, compare, sort, and classify objects based on observable physical characteristics, uses, and whether something is manufactured or occurs in nature.	<ul> <li>Story Lab- Active Listening, Learning Facts, Connections</li> <li>Science Eyes - Experiments</li> <li>Attribute Game</li> <li>Make-Believe Play: Prop Making</li> <li>Science Eyes, Science Eyes-Experiments</li> </ul>
PreK-PS1-3 (MA). Differentiate between the properties of an object and those of the material of which it is made.	<ul> <li>Attribute Game</li> <li>Make-Believe Play: Prop Making</li> <li>Science Eyes, Science Eyes- Experiments</li> <li>Venger Collage</li> </ul>
PreK-PS1-4 (MA). Recognize through investigation that physical objects and materials can change under different circumstances.  Clarification Statement: Changes include building up or breaking apart, mixing, dissolving, and changing state.	<ul> <li>Make-Believe Play: Prop Making</li> <li>Make-Believe Play Block</li> <li>Science Eyes - Experiments</li> <li>Venger Collage</li> </ul>
PS2. Motion and Stability: Forces and Interactions	
PreK-PS2-1 (MA). Using evidence, discuss ideas about what is making something move the way it does and how some movements can be controlled.  PreK-PS2-2 (MA). Through experience, develop awareness of factors that influence whether things stand or fall.  Clarification Statement: Examples of factors in children's construction play include using a broad foundation when building, considering the strength of materials, and using balanced weight distribution in a block building.	<ul> <li>Make-Believe Play Block</li> <li>Science Eyes - Experiments</li> <li>Make-Believe Play Block</li> <li>Science Eyes- Experiments</li> </ul>
PS4. Waves and Their Applications in Technologies for Information Transfer	
PreK-PS4-1 (MA). Investigate sounds made by different objects and materials and discuss explanations about what is causing the sounds. Through play and investigations, identify ways to manipulate different objects and materials that make sound to change volume and pitch.  PreK-PS4-2 (MA). Connect daily experience and investigations to demonstrate the relationships	<ul> <li>Make-Believe Play Block</li> <li>Fingerplays, Chants &amp; Songs</li> <li>Science Eyes –Experiments, Science Eyes- Senses</li> <li>Story Lab- Learning Facts, Connections</li> </ul>
between the size and shape of shadows, the objects creating the shadow, and the light source.	Science Eyes - Experiments



Attention Focusing Activities—*Fingerplays, Chants, & Songs*, and clapping games are used as attention focusing activities to capture and regain children's attention prior to starting a Tools activity. These activities also provide children with the opportunity to practice rhyme, develop oral language skills and combine speech with motor actions. AY

**Attribute Game-** Children learn to recognize basic shapes and learn about their attributes while also working on concepts such as: same/different, more/less & sorting skills. **Semester II** 

**Buddy Reading**—Children practice concepts of print, book handling skills and comprehension building, as well as turn-taking roles of reader and listener in this activity that occurs 2-3 times per week. Children also read their own writing to their 'buddy' several times/week starting in Semester II. Buddy Reading tubs are divided into categories so that children practice classification as part of the clean up routine associated with this activity. **AY** 

#### Key:

**AY**: All Year: Activity occurs across the year beginning in the first several months of school

**Semester I**: Activity is typically introduced and used in the first half of the year

**Semester II**: Activity is typically introduced and used in the second half of the year

**Classroom Practices**— The following practices are used by teachers in Tools of the Mind and are reflective of the Tools of the Mind classroom experience. **AY** 

Classroom Rules — The teacher and children collaborate to create a set of 3-4 classroom rules for all to follow. Rules are written and accompanied by an icon. Teachers are intentional in previewing relevant rules *before* activities and creatively eliciting children's use of language to remember and say the rules. **AY** 

Clean Up Routine – The teacher plays a clean up song and, while it is playing, one teacher walks around and encourages children to finish before the song is over. Children join the other teacher on the rug, and the next activity begins when the song is over.

**Daily Schedule**— Teachers post icons representing the daily schedule and review with children each day during *Opening Group*. **AY** 

**External Mediators-** Are used to support students in understanding how to begin or complete complex tasks. An example would be the use of "Lips and Ears" cards in *Buddy Reading*, to assist students in understanding when it is their turn to speak and when to listen. External mediators are used in the majority of activities in the Tools of the Mind curriculum. **AY** 



**Paired "Buddy Work"**—Children are paired during small group activities in which there are specific roles for each person. Buddies are expected to help one another and check each other's work, engaging in the Vygotskian practice of "other-regulation." Children are paired with all members of the classroom over time, supporting the development of positive relationships with every member of the group. **AY** 

Participation Styles—Teachers are deliberate in their choice of participation styles to keep all children mentally engaged. They include: *Turn & talk*— children turn to peer seated next to them and share; *Double Talk*: children turn and talk with two peers; *Choral Response*—children respond chorally to questions that have a single answer; *Individual Response*—children respond individually to questions posed by the teacher or peers. AY

**Scaffolding-** Teachers are deliberate in their instruction of students by providing supports, prompts & resources that allow them to work within their **Zone of Proximal Development** and thus achieve cognitive and social growth while fostering independence and confidence. Scaffolding may include deliberately organizing activities where peers support each other and the teacher takes on the role of a facilitator, or the teacher may provide scaffolding directly as needed. **AY** 

Community-Building Activities- Games & songs played to assist children in learning & remembering their classmates' names such as; *Name Game Chants, I Have- Who Has Names.* These activities also provide children with the opportunity to practice rhyme, develop oral language skills and combine speech with motor actions. **AY** 

Counting Activities—Activities designed to practice counting specific number of objects with accuracy and develop an understanding of self-checking and correction. Counting activities include; *Puzzles, Manipulatives & Blocks, Making Collections, Making Collections with Categories, Math Memory, Number Follow the Leader, Number Line Hopscotch, Numerals Game, Timeline Calendar*. See individual activities for more information. AY

**Do What I Do** -Children listen and/or view a pattern of actions demonstrated by the teacher, remember and replicate it in this *Attention Focusing*, *Physical Self-regulation*, and *Transition Activity*. **AY** 

**Elkonin Boxes I-II**—This is a series of games designed for practicing phonemic awareness. There are two different versions in which children learn to segment and blend words by phonemes. Children learn in small teacher-led groups. **Semester II** 

• Elkonin Boxes I- Jump the Boxes— Children use gesture, jumping and language to break apart and recombine words into individual phonemes



• Elkonin Boxes II- The Token Game — Children work in pairs to push tokens into boxes for each phoneme on selected Elkonin picture cards using gesture and language

**Fingerplays, Chants & Songs** -Used in a variety of ways. Teachers use as *Attention Focusing Activities* to capture and regain children's attention prior to starting an activity. These activities also provide children with the opportunity to practice rhyme, develop oral language skills and combine speech with motor actions. **AY** 

Free Play- A block of time separate from the *Make-Believe Play Block* where children can explore centers either independently, with peers or with scaffolding from a teacher. AY

**Freeze Game**— Children dance to music looking at poses on a card and freeze to make the pictured pose when music stops. Poses increase in complexity and challenge over time and require a high level of children's focus and attention. **Freeze on the Number** is introduced in Semester II and increases the challenge level of this activity by introducing math concepts. See section **Physical Self-Regulation**. **AY** 

Geometry, Measurement, & Data Activities— Children practice these concepts by participating in Attribute Game, I Have-Who Has Shapes, Mystery Shape, Pattern Movement, Remember & Replicate, Science Eyes, Tallying, Venger Drawing & Venger Collage, and Weather Graphing as well as by exploring materials present in the Science, Table Toys or Block Center. See individual activities for more information. AY

**Graphics Practice**— Graphics Practice is the Tools of the Mind handwriting program in which children develop the fine motor coordination required for drawing and penmanship. Children learn the strokes and shapes, correct grasp and pressure as they direct their hand's motor movements to music. Self-regulation is built into graphics practice as the children stop and start fine motor movement along with the music. Graphics Practice is conducted several times per week. **AY** 

**I Have—Who Has Games**— All I Have—Who Has Games are designed for children to gain automaticity and thus fluency in a particular skill in both literacy and math. The games are motivating, played in small groups, allow children to help one another. Games are introduced by semester listed but may be used throughout the year.

- **I Have—Who Has** Literacy Games are practiced in *Small Group* and include: Introduced Semester I and practiced throughout the year as needed:
  - o Colors—rapid naming of colors Semester I
  - o Names— children learn classmates names Semester I



- o Letters— rapid letter naming Semester II
  - Uppercase letters
  - Lowercase letters
  - Upper and Lowercase letter matching
- o Sounds—children name the sound the letter makes (not the name of the letter) Semester II
- o Vocabulary children learn vocabulary words related to the *Play Theme* AY
- I Have-Who Has Math Games include:
  - o Numerals— rapid naming of numbers Semester I
  - o Shapes—rapid naming of shapes Semester I

**Make-Believe Play Block**- is the centerpiece of the Tools of the Mind preschool program. It is a 45-60 minute block of uninterrupted time when children engage in intentional make-believe play (similar to dramatic play). Make-Believe Play occurs in all of the centers typically found in a preschool classroom. There are three primary goals:

- To develop children's underlying cognitive skills such as memory, attention & inhibitory control
- To help support children's literacy development. Through dramatization, children strengthen their vocabulary and comprehension skills by using their background knowledge and understanding of the story roles and events.
- To develop social skills involved in play such as turn taking and the ability to understand multiple perspectives

During this time block, children plan their play, engage in play together and work to clean up when play is over. Teachers scaffold *Make-Believe Play Planning* and play development, helping children become deeply engaged in play with one another, and developing ever more mature stages of play. **AY** 

Make-Believe Play Building Background Knowledge—In the first week of a new *Play Theme*, children learn about roles, actions, vocabulary and facts related to the upcoming theme. Teachers support children to use Make-Believe Play to bring this information to life during Play centers, and use this information to create setting and props for dramatic play. AY

Make-Believe Play Planning— As part of the *Make-Believe Play Block* children draw and write a plan for their dramatization using *Individual Scaffolded Writing*. Planning includes the role the child will play and role actions and speech. *Play Planning* takes place daily. AY



**Make-Believe Play Practice**— The teacher leads children in the use of gesture and language to act out the meaning of new vocabulary or facts children have learned about the roles and actions related to the theme being played in the classroom (e.g., a restaurant or hospital), as well as characters' feelings and emotions and story events and actions. Make-Believe Play Practice happens daily. **AY** 

Make-Believe Play Prop Making – Teacher provides support and materials for prop making during the background-building week of a new theme. Children also make and invent props on their own throughout the play theme using a variety of materials such as cardboard, paper, wood, tape, glue & paint. AY

**Make-Believe Play Scaffolding-** Daily support teachers provide to students to support the development of mature make-believe play. **AY** 

Making Collections- Children learn to represent quantities with objects and engage in meaningful counting in this small group activity. The format of the game is specifically designed to support partner play & turn taking that allows for the practice of self-regulation skills. In the second semester, Making Collections adds Categories to increase the challenge level of the activity by requiring children to recognize and count objects that belong to distinct categories. AY

**Math Memory-** In this small group activity, children learn to use mental visualization and language as memory tools to identify objects that have been added, removed or remain the same in an array. Children develop complex vocabulary and language to describe objects and isolate their attributes. Children have a 'Memory Buddy' with whom to practice recall strategies. **Semester I** 

Message of the Day- Supports the development of *Scaffolded Writing* by providing the teacher with the opportunity to demonstrate literacy concepts & skills within the *Zone of Proximal Development* of the children in the classroom. Message of the Day is done daily, and children practice the concepts demonstrated during *Scaffolded Writing* activities such as *Make-Believe Play Planning*. AY

Movement Games & Songs- Music & Movement activities are used throughout the day both as *Attention Focusing Activities* as well as for the development of motor skills and the exploration of musical concepts such as rhythm, beat & tempo. AY

**Mystery Literacy Activities**— Children build literacy skills by solving a daily Mystery. The games help children to practice phonemic awareness, sound-symbol correspondence, compare onset-rime patterns in words and engage with peers as they solve the mysteries together. **AY** Mystery Literacy Activities include:

• Mystery Question—Children work together to solve a daily question e.g. Are you wearing red? Students identify their name on an index card and place it under a response e.g. Yes or No Semester I



- Mystery Letter—Children identify what letter is missing (initial, medial and final positions in words) Semester II
- Mystery Rhyme— Children choose from two words which rhymes with target word Semester II
- Mystery Word—Children view a target sound and match it to the correct picture (beginning or ending sound) Semester II

**Mystery Math Activities**— Mystery Math activities are designed to teach and reinforce math concepts and engage children in meaningful conversations about math concepts. Children engage in discussion with peers to solve the mysteries. The teacher debriefs their solutions during whole group math. **AY** Mystery Math Activities include:

- Mystery Numeral—Children identify the numeral associated with a number of dots Semester II
- Mystery Numeral Two Card—Requires children to add two quantities pictured on two cards and choose answer Semester II
- Mystery Pattern—Children determine if patterns pictured on strips are the same or different Semester II
- Mystery Shape—By manipulating two pieces of a shape, children determine which pair of composite shapes compose a target shape Semester I

Name Games- Children participate in songs and chants designed to help them learn the names of their classmates. Name Games occur daily at the beginning of the year and are part of the larger construct of *Community Building Activities*. Semester I

**Number Follow the Leader-** Children take turns being the leader that demonstrates a movement to the class which is then replicated a specific number of times by all the children. **Semester II** 

**Number Line Hopscotch**—This small group activity is designed to practice rote counting by pairing one child's jumping numbered carpet squares with the group's oral counting and clapping. In a more challenging version, the carpet squares are arranged in challenging nonlinear arrangements and include numerals up to 20 or greater. **Semester II** 

Numerals Game— In this small group activity, children play in pairs taking turns to count and check a number of objects specified on a numeral card, learning to count and recognize numerals 1-10, then 1-20. AY

Opening Group – Teachers and children start the day in a large group activity which includes *Attention Focusing Activities*, *Timeline Calendar, Weather Graphing, Share the News, Message of the Day, and Physical Self-Regulation Activities*. Opening Group should not exceed 15 minutes. AY

Outdoor Play- Time provided for children to play outside with a variety of structures and materials on a daily basis AY



Pattern Movement—Children use gesture and language to replicate patterns in this teacher-led *Physical Self-Regulation Activity*. AY

Physical Self-Regulation Activities—A key component in developing self-regulation in the Tools of the Mind program are the physical self-regulation activities. Children practice physical self-regulation by planning and inhibiting specific actions until the appropriate moment. The activities are designed to allow children to practice controlling body movements by matching them to cues. Physical Self-regulation Activities are used to focus children at the start of new activity blocks to prepare children to learn. They learn to follow multi-step directions and increase in complexity throughout the year. Activities include: *Freeze Game, Pattern Movement, Number Follow the Leader, Movement Games & Songs, Do What I Do, Fingerplays, Chants & Songs, Mouse Trap, and Mr. Wolf.* 

**Play Themes-** Five Play Themes are provided to teachers to begin the school year: Family, Restaurant, Grocery Store, Hospital/Health Clinic & Pets & Vets. Teachers are provided with guidance on how to create their own *Play Themes* based on the interests of the children in their class and the resources of the community to create Make-Believe Play Centers for the remainder of the year. **AY** 

Poems- Children are exposed to poems both during *Fingerplays, Chants & Songs* as well as *Write a Familiar Fingerplay*. Semester II

**Pretend Transitions**—Children combine gesture, private speech, and pretending during all transitions throughout the day in this **Self**—**Regulation Transition Activity. AY** 

**Private Speech-** a Vygotskian term meaning audible self-directed speech that assists one with regulating thinking & behavior. The tactic of use of Private Speech is taught to students in the Tools of the Mind curriculum as a strategy for learning & self-regulation. **AY** 

**Puzzles, Manipulatives & Blocks** — Teacher facilitated small group experience where children explore, plan and create using Tangrams, Cuisenaire Rods, Unifix Cubes, Patterns Blocks and Jigsaw and Puzzles, and other Manipulatives & Math materials. These materials are also available for exploration in the Table Toys Centers during Free Choice. **Semester I** 

**Remember & Replicate-** In this small group activity, children remember and replicate sets of play dough forms different colors, sizes and shapes that they first watch the teacher make and assemble. The activity develops the child's fine motor skills, memory & knowledge of positional words and shape, spatial and color concepts. **Semester I** 



Rhyming Game — Children are asked to make a rhyme with the word modeled by the teacher. Children make rhyming words with their peers (turn & talk, double talk) and respond chorally to the teacher with examples. Semester II

**Scaffolding-** Teachers are deliberate in their instruction of students by providing supports, prompts & resources that allow them to work within their **Zone of Proximal Development** and thus achieve cognitive and social growth while fostering independence and confidence. Scaffolding may include deliberately organizing activities where peers support each other and the teacher takes on the role of a facilitator, or the teacher may provide scaffolding directly as needed. **AY** 

**Scaffolded Writing**—In the Tools of the Mind program, writing is seen as the gateway to literacy learning. As children learn to encode, they are practicing all skills needed for decoding. **AY** 

- Shared Scaffolded Writing In this shared writing experience, children learn the mechanics of how to do Scaffolded Writing with the support of both teacher and peers. The teacher introduces and models the process step by step, and children then write all together. Children learn concept of word, voice-to-line match, sound-to-symbol correspondence and how to use the *Sound Map*. Children learn that writing has a purpose and develop the ability to "read" and "re-read" their writing, all steps on the path to decoding. Shared Scaffolded Writing occurs during *Message of the Day, Write a Familiar Fingerplay & Write Along*. AY
- Individual Scaffolded Writing A child produces an individual, unique written product demonstrating levels of understanding of meaning and mechanics. Children receive scaffolding support from adults and peers and, when ready, use the *Sound Map* to practice sound-to-symbol correspondence. The primary Individual Scaffolded Writing activities include: *Make-Believe Play Planning, Story Lab- Learning Facts, Science Eyes, Story Lab Story Extensions.* AY

Science Eyes —Science activities designed to apply and extend children's knowledge, develop new vocabulary, learn and apply scientific method of discovery, observation, data collection, data recording and analysis. Children work in pairs, taking turns looking at objects and describing what they see using a variety of senses. Children draw, write and use mathematics in these activities. AY Science Eyes activities increase in complexity throughout the year and include:

- Science Eyes-Science Experiments This version of Science Eyes includes long-range observational studies and experiments Semester II
- Science Eyes- Journals- Children are provided with journals in which to record their observations during Science Eyes experiments or long-range observational studies. Semester II



• Science Eyes – Senses – Children learn to classify their observations and remember to use more than one sense to observe. Semester II

**Self-Regulation Transition Activities**—Designed to promote focused attention, deliberate memory and the use of private speech (all components of self-regulation) to set the stage for children to learn. These activities are designed to use during transitions and less structured times during the day. Activities include: **Do What I Do and Pretend Transitions**. See individual activities for descriptions. **AY** 

Share the News—During Share the News, children engage in collaborative conversations with peers, taking turns in conversations. There are rules to guide Share the News. Topics are presented by the teacher; including feelings, social problem solving, opinions, ideas and concepts. Tools participation styles, *Turn & Talk* and *Double Talk*, are used. AY

Small Group Activities (Math/Science & Literacy)- Refers to an instructional practice whereby children are divided into two or three groups to engage in a teacher planned and facilitated learning experience with a specified learning objective from the Tools of the Mind curriculum. Small group learning activities happen daily. AY

**Sound Map- (consonant & vowel)** – a map of letters with a pictorial representation designed to allow children to explore sound-to-symbol correspondence and develop phonemic awareness. **AY** 

**Story Lab**—Story Lab is an interactive reading activity where children listen with a purpose, with a specific comprehension strategy in mind and then answer questions related to the strategy. Story Lab is an integral part of Dramatization, Scaffolded Writing activities and decoding instruction. Story Lab is connected to both Dramatization as well as Math & Science concepts. The teacher leads the children with speech and gesture to process information, remember story elements and actively practice comprehension strategies. **AY** 

- Story Lab Active Listening Children learn to ask and respond to questions about ideas and facts within a text. AY
- Story Lab Character Empathy— Children think about and label what a character is feeling AY
- Story Lab Connections— Children make connections between something that is known and something that is learned from a text AY
- Story Lab Extensions- Children use drawing and writing to extend a predictable, patterned book Semester II
- Story Lab Learning Facts Children talk about an eventual draw a fact from a Non-Fiction text Semester I
- Story Lab- Predictions—Children make text-based predictions about the next chapter based upon background knowledge of the developing story line within the book Semester II
- Story Lab-Story Grammar— Children identify and diagram the main characters, setting and sequence of events Semester II



• Story Lab-Vocabulary—Children learn the meaning of new words and practice remembering their meaning AY

Take-Away Sounds- A teacher led activity that prompts children to break words up into initial sounds (onset) and rime. Semester II

Tallying— Children learn how to create a visual model of "5" and to track of items counted with different questions. Semester II

**Timeline Calendar**— Timeline Calendar uses a number line for the concept of time in this daily *Opening Group* activity. Children are able to learn that days make up months, and months make up years and that time is a continuous concept. Teachers lead children in counting and clapping the days and practice time vocabulary like before, after, until, how long. At the end of the year, teachers transform the number line with children into a conventional monthly calendar format. **AY** 

**Venger Drawing**— Children use basic shapes to make their own pictures, applying the concept of shape in am meaningful context in this small group activity. Children learn to discuss, imagine and then incorporate basic shapes into their own drawings and label their designs. **Semester I** 

**Venger Collage**— In this more challenging version, children cut, paste and incorporate colored geometric shapes into their Venger Drawings. Children write a sentence to describe their creation. **Semester II** 

Weather Graphing—Children learn to observe and use a graph to record, summarize, read and analyze weather data in this daily *Opening Group* activity. Children practice math skills, comparing quantities, counting to confirm and the concept of zero. AY

Write a Familiar Fingerplay- A teacher led activity that is an extension of *Message of the Day*, where *Shared Scaffolded Writing* is used to model writing a familiar fingerplay, song, chant or poem for students. Semester II

Write Along— A teacher led activity that is an extension of *Message of the Day* where children write the daily message using *Shared Scaffolded Writing* instead of participating verbally as the teacher writes. Semester II

**Zone of Proximal Development (ZPD)-** A term used to explain the Vygotskian description of how learning and development are related. At the bottom of the Zone of Proximal Development is what the child can do independently. At the top of the Zone is what the child can do with maximum assistance. Knowing what a child's ZPD is for any given skill allows the teacher to most effectively provide instruction as it can be aimed at a level just beyond what the child can do independently thereby allowing learning to lead development.



In addition to all of the above Tools of the Mind Terms and Activities, each Tools of the Mind preschool classroom will usually also include the following centers typically found in early childhood classrooms:

**Art Center-** One of the six centers, Art Center activities include exploration of open-ended materials such as paint, play-doh, markers & crayons as well as materials for creation of three-dimensional art projects such as glue, wood and found materials. **AY** 

**Block Center**— One of the six centers, Block Center activities include exploration of open-ended construction materials such as Unit Blocks, books on construction and related play materials that support building such as signs, trucks and small people and animals. **AY** 

**Dramatic Play Center-**One of the six centers, Dramatic Play Center activities include exploration of open-ended materials such as fabric and costumes, kitchen set and furniture, pretend food and props for role-play. **AY** 

Listening Center—Classrooms may include a Listening Center where children listen to recorded books in their Literacy Center. AY

**Literacy Center-** One of the six centers, Literacy Center activities include exploration of open-ended literacy materials such as books on various topics, writing paper and implements, listening center materials, computers and other technology, journal and letter writing materials and other literacy related play materials. **AY** 

**Science Center-**One of the six centers, Science Center activities include exploration of science materials such as magnets, magnifying glasses, objects from nature, living things, and sensory materials. **AY** 

**Table Toys Center**— One of six centers, children explore, plan and create using Tangrams, Cuisenaire Rods, Unifix Cubes, Patterns Blocks and Jigsaw and logic puzzles and other selected small Manipulatives & Math activities. **AY**