

Purpose	Content	Lessons
<p><i>A high priority for the AEC is the study and application of mathematics. We use many materials in the classroom and will increase our use of Math on Paper in Cycle 3.</i></p>	<p>MATH: Measurement and Geometric Figures</p>	<p>A. MATH EXPLORATION. What are your great opening math MOMENTS?</p> <ol style="list-style-type: none"> 1. Introduce the Math Shelves of the classroom by giving group tours and multiple lessons. Set up time each morning to do this. 2. Also, introduce the Math on Paper puzzles on the wall (worksheets that are mounted). These puzzles will rotate but should <u>always include math facts and operations, mapping and measuring, geometry and word problems.</u> 3. Invite small groups of Learners to explore work on the shelves that allows them to practice BASIC MATH FACTS/OPERATIONS. <ul style="list-style-type: none"> – Include addition, subtraction, multiplication, and division. – Ask what materials look more fun or interesting and explain what that material allows them to Learn. – Ask them to choose an easy material and a more difficult material. – Use Montessori Materials to ensure Learners have a strong foundation of: <ul style="list-style-type: none"> - Place value (Golden Beads and Stamp Game) - Work with the Material to introduce divisibility, multiples of numbers, fraction. - Hierarchy Material

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		<p>B. GEOMETRY EXPLORATION:</p> <ol style="list-style-type: none"> 1. Share the <u>Story of Geometry</u>. 2. Introduce the MATERIALS on the SHELVES briefly and begin with introductory lessons in GEOMETRY: Lines, angles, etc. 3. Introduce a new lesson to Learners each week in this section. 4. Make certain, the Montessori Protractor and the protractors are included on the shelf and make time to introduce the <u>STORY OF THE BABYLONIANS</u> (AMI album). 5. Learners will complete TWO of the following: <ul style="list-style-type: none"> – Create a book of the geometric figure, the parts, and functions. – Find and label those parts in the classroom or outside. – Create a map of where those figures are located. – IN the Atelier, create an artwork using only the figure introduced <p>C. INTRODUCTION TO CONVERSIONS (can be done in association with Measurement).</p>

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		<p>1. CREATE a KWL chart for Conversions.</p> <ul style="list-style-type: none"> – Why do we convert measurements? When do we do it in our everyday lives? – Why do we have two types of general measurement? How do we convert from American to metric and vice versa? – How do we also convert to different measurements within the same system of measuring? – Incorporate the Montessori Decimal Place Value Candelabra lesson into your work with the metric system. – Ask Learners to pair up and make charts that their Parents can use in converting measurements at home (since very few adults can actually do this) in addition to the one in the classroom. <p>2. COOKING</p> <ul style="list-style-type: none"> – Set up a Cooking Station at the onset of the Year in the TSH Kitchen. – Each Learner will have the opportunity once a year. – 3-5 Learners each month will be choosing a recipe from one of the countries we are studying to create for lunch one day out of the month.
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		<ul style="list-style-type: none"> – Budget \$5.00 per Learner per month. – These Learners are responsible for each aspect of that day’s lunch menu: <ul style="list-style-type: none"> ● Choose a recipe. ● Calculate how much is needed to feed each Learner in the class (Maybe Educators too?) (Recipe is for 4 servings, 20 Learners in class - multiply by 5) ● Collect money and calculate cost. ● Going-out Trip to the store ● Make sure that each food group is represented - nutritious meal (not only desert) ● Cook the meal and serve it. ● Clean up afterwards