# Grade 6 Math Board



# Choose at least 1 activity from the board each day. When you complete the activity, color in the square. Try to get Tic-Tac-Toe, 3 in a row or complete the entire board and color in the whole

### board. Have fun!

<ul> <li>1.</li> <li>Find at least 2 different rectangular prisms in your house. Determine the volume of each of your rectangular prism. Analyze the differences among the rectangular prisms and summarize your findings.</li> <li>(V = 1 x w x h)</li> </ul>	<ul> <li>2. Create a table with four columns. Label the columns with: Activity; Estimated Time; Actual Time; Actual Time in Seconds. Estimate and record how long you think it will take you to do the following tasks: <ul> <li>Read one page of your favorite book or magazine.</li> <li>Touch your toes 50 times</li> <li>Write the alphabet in cursive</li> <li>Stand/balance on one foot Perform each of the tasks while timing yourself with a stopwatch. Record the actual time taken to do each task.</li> </ul> </li> </ul>	3. <b>Plan</b> and <b>design</b> a map of an amusement park or playground using angles and geometric shapes. Include all parts of a map (title, key, compass rose, author, date). The following measurements must be included: 30D, 45D, 70D, 75D, 115D, 140D, 165D, and 180D <b>Label</b> the measure of each angle. Write a description of your design.
<ul> <li>4.</li> <li>Find a favorite recipe. Which ingredients do you need the most of? Which ingredients do you need the least? Write a list of your ingredients from GREATEST to LEAST.</li> <li>Double your recipe and write down the amount of ingredients you need.</li> </ul>	5. Plan and design a treasure map using your home. Select an ending point (such as your bedroom, kitchen, or living room). Determine the starting point. Devise directions using measurements as part of the instructions. (For example: Start at the EXIT door and walk 1 1/8 meters, turn left and walk forward 2 1/3 yards) Include the following: inches, feet, yards, millimeters, centimeters, meters	6. Which one doesn't belong? Explain <b>0.25</b> 1 4 25 minutes
7. <b>Locate</b> at least 10 decimals and/or mixed numbers in the newspaper (prices, weights, sports statistics). <b>Construct</b> a number line to <b>position</b> the decimals and fractions that you found. Be sure to use an appropriate scale.	8. Model the following equation using manipulatives ( <i>Hands-on</i> Equations kit or counters) : $4X + 2$ = $X + 14$ Illustrate or explain in writing the steps used to solve this equation. Create at least 2 more equations to solve. Solve each equation using manipulatives and illustrations.	<ul> <li>9.</li> <li>Develop a booklet to teach kindergarten students about basic measurement.</li> <li>Include the following: <ul> <li>ruler (inch, foot, yard, millimeter, centimeter and meter)</li> <li>scale (ounce, pound, gram)</li> <li>liquid measuring devices (ounce, pint cup, quart, gallon, and liter) Include simple illustrations and descriptions, keeping your young audience in mind.</li> </ul> </li> </ul>

# **Resource Page Grade 6 Mathematics Extension Menu**

# **Concept and/or Topic: Measurement**

# **Intended Purpose: Enrichment Activity**

# Domain: Measurement and Data/Operations in Algebraic Thinking

## **Standards Addressed:**

#### Box 1

5.MD.5: Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

#### Boxes 2 6, and 7

5.MD.1: Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step real world problems. Mathematical Practice #9: Solve problems in novel ways and pose new mathematical questions of interest to investigate.

#### Box 3

5.G.4: Classify two-dimensional figures in a hierarchy based on properties. Introduce protractor and measurement of angles (Grade 7).

#### Boxes 4, 5, and 9

5.MD.1: Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step real world problems. Mathematical Practice #9: Solve problems in novel ways and pose new mathematical questions of interest to investigate.

#### Box 8

5.OA.2 Write simple expressions that record calculations with numbers and interpret numerical expressions without evaluating them.