

Math Mystery Investigations

Books used:

One Minute Mysteries: 65 Short Mysteries You Solve With Math!
101 Things Everyone Should Know About Math

<p><i>Roll of the Dice</i> (65 SMM) P. 19</p>	<p>So, Who Is Most Likely To Set the Table, Kim, Brian or Quentin?</p> <p>Use the two dice to solve the problem. Record your evidence in the notebook. Write your explanation.</p>	<p>Dice</p>
<p><i>Corralling the Problem</i> (65 SMM) P. 31</p>	<p>How will Nicole help Valerie? Will they need to buy more fence pieces?</p> <p>Using the connecting cubes, what can you build to hold the largest number of horses? How did you solve? Record your thinking.</p>	<p>Plastic Horses 40 Connecting cubes</p>
<p><i>Toss Up</i> (65 SMM) P. 39</p>	<p>How Many Cookies Will Isaac Eat? Which one of you Will Eat the Most Cookies? What Are the Odds?</p> <p>In your notebooks, Make a T-chart with heads/tails as the column titles begin flipping a coin recording the results. Repeat ten times. Can you explain how Isaac knew exactly what the odds were? Record it in your notebook.</p>	<p>Quarter</p> <hr/> <p>notebook</p> <hr/> <p>pencil</p>

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<p><i>Mixing It Up</i> (65 SMM) P. 125</p>	<p>Why will the punch taste different? What does Mary know?</p> <p>Use the story & the materials provided; can you demonstrate why the recipe will taste different? Record your explanation in the notebook.</p>	Water (blue)/(green)
		2 quart bottle (empty milk)
		2 liter bottle (empty soda)
<p><i>String Theory</i> (65 SMM) P. 127</p>	<p>Which team will get the free homework passes? Why did Jacob's team win?</p> <p>Read the story and use the materials to try to figure out how to solve the problem. Record using diagrams and labels or write a claims and evidence statement in your notebook.</p>	2 boxes (same size) Priority Mail box 12x12
		String/yarn 96 inches
		Tape measures
		Tennis Balls
<p><i>Turning Up the Volume</i> (SMM) P. 133</p>	<p>How did Travis figure this out without a tape measure? In your notebook, "I predict the average volume of a marble is ____ cubic centimeters. I think this because_____."</p> <p>Using the materials provided how try to figure how Travis solved this problem?</p> <p>Record you actual data in your notebook using the frame, "My data did/did not agree with my prediction. My evidence is_____."</p>	Notebook/Pencil
		Marbles (10-20)
		Water
		1000 milliliters graduated cylinder
		Graduated cylinder/container

<p><i>Paper Chase</i> (65 SMM) P. 141</p>	<p>How many grams does one piece of paper weigh?</p> <p>In your notebook, make a prediction, “I predict one piece of paper weighs _____g(grams). I think this because_____.” Using the materials and equipment provided, figure out how much one piece of paper weighs. In you notebook, “A piece of paper weighs _____g (grams). I know this because_____.”</p>	Notebook/pencil
		scale
		Unopened ream copy paper 1-5 sheets loose paper
<p><i>Ice Cream, Anyone ?</i> (65 SMM) P. 145</p>	<p>Cora’s Ice Cream Parlor has 12 flavors? How will she be able to make 21 unique two-scoop ice creams?</p> <p>Work on the problem on the ice cream sheet.</p>	Colored pencils
		Ice Cream Sheet (in notebook)
<p><i>Facts and Figures</i> (101 Math #8) P. 19</p>	<p>So, What do you know about Geometry?</p> <p>Teachers and students play online geometry game and use information to complete Facts and Figures in your notebook.</p>	<p>Matho Game (online game)</p> <p>http://goo.gl/24W3pU</p>
<p><i>10 Polygon Area</i> (101 Math #10) P. 20</p>	<p>Can you arrange the polygons from least to greatest?</p> <p>Use the polygons and draw them on your gridded notebook paper to find out the order from smallest to largest surface area.</p>	Pattern Blocks
		Graph paper

<p><i>Terrific Tessellations</i> (101 Math #76) P. 50-51</p>	<p>Create tessellations.</p> <p>Record in notebook. Color design (optional) Which of the shapes will not tessellate? Record your understanding in the notebook.</p>	Pattern blocks
		Notebooks
		Colored pencils
<p><i>Map Quest</i> (101 Math #77) P. 51</p>	<p>What is the least number of questions you will need to make sure no adjacent states have the same color?</p> <p>In your notebook, “I predict I will use _____ colors to complete this challenge.</p> <p>Work on the Map. In notebook, “I needed ____ to complete the challenge. My evidence/data is _____.”</p>	US Map template
		Colored pencils
		Notebook