

Mathematics: Measurement and Date

| 2.MD.8 | <p>Cluster Heading: 2.MD.C Work with time and money.</p> <p>Content Standard: 2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.</p> <p>Practice Standards: MP.3 Construct viable arguments and critique the reasoning of others, MP.6 Attend to precision.</p> | |
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| Problem/Task Suggestions | | Formative Assessment Suggestions |
| <p>Penny a Day Your mom has agreed to give you an allowance! You must choose between 2 methods of payment. You may choose \$.75 a day for 15 days or you may choose a penny the 1st day, which doubles every day for 15 days. Explain your choice using good math language and symbols. Include a chart, graph, or table in your explanation.</p> <p>Differentiation</p> <p>Supports</p> <ul style="list-style-type: none"> • Provide students with a calendar. • Provide students with a calculator. • Reduce the number of days. <p>Extensions</p> <ul style="list-style-type: none"> • Have students create their own word problem that relates to the relationship between multiplication and doubling. • Have students determine the least amount of days they would need to have the second choice make more money. <p>Solution The first choice: $15 \text{ days} \times \\$0.75 = \\$11.25$</p> <p>The second choice: $\\$.01 + \\$.02 + \\$.04 + \\$.08 + \\$.16 + \\$.32 + \\$.64 + \\$1.28 + \\$2.56 + \\$5.12 + \\$10.24 + \\$20.48 + \\$40.96 + \\$81.92 + \\$163.84 = \\327.67</p> | | <p>Observation of Students Does the student:</p> <ul style="list-style-type: none"> • Understand the difference between multiplication and doubling? • Understand how to create a chart, graph, or table? • Understand how to use addition and multiplication? • Use proper symbols? <p>Questions to Guide Student Thinking</p> <ul style="list-style-type: none"> • What would you guess and why? • Can you estimate to get an idea of the answer? • How could you represent your reasoning in a chart, graph, or table? • What information do you need from the problem? <p>Misconceptions Students may</p> <ul style="list-style-type: none"> • Not remember to add the value for each day together. • Not understand the value is doubling each day and therefore may only multiply by 2 the first day. <p>Vocabulary Considerations Dollars, cents, chart, graph, table, double</p> |
| <p>Source: Area V SSOS Math Coaches</p> | | |