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| **Synopsis of high-quality task:**Students will make decisions for how to spend money to buy gear for a softball team, given a budget, the cost of individual items and number of people on the team. **Anticipated student time spent on task:** 50 minutes**Student task structure(s):** Individual and partner work**Task Source:** created in-district |
| [**Math Content Standards and Practices:**](http://www.doe.mass.edu/frameworks/math/2017-06.pdf)Operations and Algebraic Thinking**4.OA.A** Use the four operations with whole numbers to solve problems.Number and Operations in Base Ten**4.NBT.B** Use place value understanding and properties of operations to perform multi-digit arithmetic on whole numbers less than or equal to 1,000,000.**SMP.1** Make sense of problems and persevere in solving them.**SMP.2** Reason abstractly and quantitatively.**SMP.3** Model with mathematics.**SMP.6** Attend to precision. |
| **Prior Knowledge:** Operations and Algebraic Thinking**3.OA.A** Represent and solve problems involving multiplication, and division.**3.OA.D** Solve problems involving the four operations, and identify and explain patterns in arithmetic.Number and Operations in Base Ten3.NBT.A Use place value understanding and properties of operations to perform multi-digit arithmetic. |

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| **Connections to the real-world:*** Sports teams and Sports gear
* Purchasing equipment for a team
* Working with a budget
 |
| **Mastery Goals:****Content Objective:**Students will be able to reason and apply whole number computation skills to propose a solution to a problem. **Language Objective:**Students will be able to justify their conclusions and communicate them to others. |
| **Teacher instructions****Instructional Tips/Strategies/Suggestions:**Read the problem once as a class, then allow time for students to read the problem a second time to themselves. Students should mark-up the problem as they read it themselves. (10 min)Assign students to begin solving the problem independently. (15 min)Allow students to share their thinking with partners then finish/revise/improve their solutions. (15 min)During this time, monitor students to identify potential students to share their approach.Debrief by inviting selected students to share their different solutions. (10 min) |

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| **Instructional Materials:** * Directions are embedded in task
* Provide blank paper, lined paper, or grid paper.
* Scoring rubric

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|  | Above and Beyond | On Target | Almost There | Not Yet |
| Problem Solving | The responseaccuratelydescribes twoways to spend the money. | The responseaccuratelydescribes oneway to spend the money. | The responsedescribes howto spend the money, but isonly partiallycomplete or accurate. | A response isoffered, but itis not completeor accurate. |
| Communication | Appropriatestrategies forboth ways areshown/explained step-by-step. Thefinal answersare writtenclearly. | Appropriatestrategies forone way areshown/explained step-by-step. Thefinal answer iswritten clearly. | Appropriatestrategies arepartially shownor explained.The finalanswer maynot be writtenclearly. | Appropriatestrategies arenot shown orexplained. Thefinal answer isnot writtenclearly. |

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| **Accessibility and Supports:** **Potential sentence starters:**One way that Coach Hurter could spend the money is…Coach Hurter could buy…The total cost for the \_\_\_\_\_\_\_\_\_\_ would be \_\_\_\_\_\_\_\_\_\_**Key academic vocabulary:**BudgetPurchaseSpendDescribeJustify |

Student Worksheet

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ryan’s Sports Store**

Coach Hurter wants to buy items for the softball team. There are 10 players on her team, and she has a budget of $800. She is going to purchase the items from Ryan’s Sports Store.

Describe one or two different ways that Coach Hurter could spend all (or nearly all) of her budget on items for her players. Justify your decisions.

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| Ryan’s Sports Store |
| Jacket | $40 |
| Sweatshirt | $22 |
| Hat | $5 |
| T-shirt | $10 |
| Sweatpants | $18 |
| Duffel Bag | $35 |

Sample Student Work: Example 1

Student work: Example 2

