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| About this Lesson |
| Students will analyze and assess the value (cost and quality) of products purchased at a dollar/discount store compared to a specialty store. |

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| **Grade Level** | **Course(s)/subject(s)** | **Learning Goal(s)** | **Suggested****Timing** |
| 4-8 | Mathematics | I will compare the cost and quality of various items that can be purchased at discount and specialty stores and make judgments about value for those items. | One 45–60-minute period |

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| Curriculum Links |
| **Mathematical Process Expectations (4–6)**PROBLEM-SOLVING * Develop, select and apply problem-solving strategies as they pose and solve problems and conduct investigations, to help deepen their mathematical understanding

REASONING AND PROVING * Develop and apply reasoning skills (e.g., classification, recognition of relationships, use of counter-examples) to make and investigate conjectures and construct and defend arguments

REFLECTING * Demonstrate that they are reflecting on and monitoring their thinking to help clarify their understanding as they complete an investigation or solve a problem (e.g., by comparing and adjusting strategies used, by explaining why they think their results are reasonable, by recording their thinking in a math journal)

SELECTING TOOLS AND COMPUTATIONAL STRATEGIES * Select and use a variety of concrete, visual and electronic learning tools and appropriate computational strategies to investigate mathematical ideas and to solve problems

CONNECTING * Make connections among mathematical concepts and procedures, and relate mathematical ideas to situations or phenomena drawn from other contexts (e.g., other curriculum areas, daily life, sports)

REPRESENTING * Create a variety of representations of mathematical ideas (e.g., by using physical models, pictures, numbers, variables, diagrams, graphs, onscreen dynamic representations), make connections among them and apply them to solve problems
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| Curriculum Links (cont’d.) |
| COMMUNICATING * Communicate mathematical thinking orally, visually and in writing, using everyday language, a basic mathematical vocabulary and a variety of representations, and observing basic mathematical conventions

Number Sense and Numeration (Overall Expectations)Grade 4* Read, represent, compare and order whole numbers to 10,000, decimal numbers to tenths and simple fractions, and represent money amounts to $100
* Solve problems involving the addition, subtraction, multiplication and division of single- and multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to tenths and money amounts, using a variety of strategies
* Demonstrate an understanding of proportional reasoning by investigating whole-number unit rates

Grade 5* Read, represent, compare and order whole numbers to 100,000, decimal numbers to hundredths, proper and improper fractions, and mixed numbers
* Solve problems involving the multiplication and division of multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to hundredths, using a variety of strategies
* Demonstrate an understanding of proportional reasoning by investigating whole-number rates

Grade 6* Read, represent, compare and order whole numbers to 1,000,000, decimal numbers to thousandths, proper and improper fractions, and mixed numbers
* Solve problems involving the multiplication and division of whole numbers, and the addition and subtraction of decimal numbers to thousandths, using a variety of strategies
* Demonstrate an understanding of relationships involving per cent, ratio and unit rate

Number Sense and Numeration (Overall Expectations)Grade 7* Represent, compare and order numbers, including integers
* Demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers
* Demonstrate an understanding of proportional relationships using per cent, ratio and rate

Grade 8* Represent, compare and order equivalent representations of numbers, including those involving positive exponents
* Solve problems involving whole numbers, decimal numbers, fractions and integers, using a variety of computational strategies
* Solve problems by using proportional reasoning in a variety of meaningful contexts
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| Inquiry Question |
| Does a higher price necessarily mean a higher value? |

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| Materials List |
| * Chart Paper and Markers
* Appendix A: Compare/Contrast T-Chart – one copy to be screened or copied onto chart paper
* Appendix A: Compare/Contrast T-Chart – one copy per group
* Appendix B: Journal Rubric
* Student Journals
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| **Timing**(Mins.) | **Lesson Sequence** | **Assessment for and as Learning Opportunities** (self/peer/teacher) |
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| MINDS ON |
| 10–15 minutes | Whole Class – Pick one item you can buy at a discount/dollar store and compare it to one from a specialty retailer (e.g., calculator, pencil crayons, markers). Lead a discussion about the pros and cons of each item (T-Chart – Appendix A). What makes one more “valuable”? Create a list of adjectives to describe objects based on the term value. (ex. price, quality, function, longevity). | Assessment for Learning – how do students understand the term “value”? |
| ACTION |
| 25–30 minutes | Place students in groups of 4 to 6. Provide each group with two comparable items to compare/contrast based on the values list generated previously. It can be hard items, Internet links or pictures of items from a local school supply store compared to a comparable item from a dollar/discount store, or flyers from a school supply store. In small groups, students will work through creating a T-Chart for the items (re-use Appendix A). They will have to use consensus to decide which product they’d choose. Groups must justify responses.Groups will also predict a five-year plan for each product (low and high cost), looking into the longevity of each product; how long would each last and what would be the cost to the consumer over a five-year period? (e.g., a calculator, which costs $5 would cost $1 per year versus a $1 calculator may break and have to be bought again year after year for a cost of $1 per year = even)Each group will present their products to the class and explain the process of their decision. | Assessment as Learning – placing value on items over time; co-create Success Criteria |

| **Timing**(Mins.) | **Lesson Sequence** | **Assessment for and as Learning Opportunities** (self/peer/teacher) |
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| CONSOLIDATION/DEBRIEF |
| 15–20 minutes | **Journal Choice:**Students will write a journal entry on one of the topics below:Now, or as an adult, on what item(s) might you be willing to spend more? (e.g., shoes, jeans, backpack, a car; things that will “last”) ORIf lower cost products break easily and have to be thrown out more frequently, is there an environmental factor (especially waste) to your decisions? Are there times when it makes more sense to buy a more “disposable” item? | Assessment of Learning – Journal Rubric  |

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| EXTENSION IDEAS: |
|  | Discussion/Inquiry Question: Why are some products “undersold”? (i.e., the promo price is clearly below cost) |  |

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| Compare/Contrast T-Chart |
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| **Dollar Store (Item)** | **Specialty Store (Comparable Item)** |
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**APPENDIX A**

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| Journal Rubric |
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|  | Level 1 | Level 2 | Level 3 | Level 4 |
| Understanding of content (why different/similar products have different prices) | Demonstrates limited understanding of content | Demonstrates some understanding of content | Demonstrates considerable understanding of content | Demonstrates thorough understanding of content |
| Use of critical/creative thinking processes (journal debates pros and cons of quality versus price) | Uses critical/ creative thinking processes with limited effectiveness | Uses critical/ creative thinking processes with some effectiveness | Uses critical/ creative thinking processes with considerable effectiveness | Uses critical/ creative thinking processes with a high degree of effectiveness |
| Expression and organization of ideas and information (journal ideas flow) | Expresses and organizes ideas and information with limited effectiveness | Expresses and organizes ideas and information with some effectiveness | Expresses and organizes ideas and information with considerable effectiveness | Expresses and organizes ideas and information with a high degree of effectiveness |
| Making connections within and between various contexts (between earlier activities and journal prompt) | Makes connections within and between various contexts with limited effectiveness | Makes connections within and between various contexts with some effectiveness | Makes connections within and between various contexts with considerable effectiveness | Makes connections within and between various contexts with a high degree of effectiveness |

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**APPENDIX B**

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