

Academic Standard for Mathematics

<https://learningconnection.doe.in.gov/Standards/PrintLibrary.aspx>

Lesson Objective

By the end of the lesson, students will be able to:
7.2.3 Solve problems that involve discounts, markups, and commissions.

Standards for Mathematical Practices

- ☒ Make sense of problems and persevere in solving them.
- ☐ Reason abstractly and quantitatively.
- ☐ Construct viable arguments and critique the reasoning of others.
- ☐ Model with mathematics.
- ☐ Use appropriate tools strategically.
- ☒ Attend to precision.
- ☐ Look for and make use of structure.
- ☐ Look for and express regularity in repeated reasoning.

Type of Mathematical Knowledge Objective is seeking to measure

- ☒ Declarative
- ☒ Procedural
- ☒ Conceptual

Mathematic Conceptual Categories

- ☐ Number and Quantity
- ☐ Algebra
- ☒ Functions
- ☐ Modeling
- ☐ Geometry
- ☐ Statistics and Probability

Common Core Literacy Standards: <https://learningconnection.doe.in.gov/Standards/PrintLibrary.aspx>

Reading/Writing for Technical Subjects:

Supporting Diverse Learners

Student Assets: The student's willingness to try problems.

Anticipated Challenges: The student read below grade level.

Considerations for IEP and/or ILP:

Checklist Overview: Use the checklist below to select your method(s) and your support strategies for this lesson. In the agenda section that follows, be sure to name the strategies in the appropriate section.

Rationale for Method(s): Why are you approaching the lesson this way?

I decided to use guided practice so that the student could get help while trying to decode the problems. I also chose a hands-on activity so that the student could practice by herself and gain confidence in her computation skills.

Method(s) for Instruction

- ☐ Class/Group Discussion
- ☐ Cooperative Learning
- ☐ Small Group
- ☒ Guided Practice
- ☐ Lecture or Direct Instruction
- ☐ Question/Answer
- ☐ Learning Stations

- ☐ Teacher Modeling/Demo.
- ☐ Journal writing
- ☐ Role Play
- ☒ Hands-on
- ☐ Inquiry Learning
- ☐ Game
- ☐ Simulation/Role Playing
- ☐ Independent Learning
- ☐ Other

Use of Technology

- ☐ Cell Phone
- ☐ PollEverywhere.com
- ☐ CPS Clickers
- ☐ Elmo Document Camera
- ☐ Software
- ☐ Student Computers
- ☐ Teacher Computer w/LCD
- ☐ Video Clips/DVD
- ☐ Website
- ☐ Web 2.0 tool
- ☐ Other

Study Skills	Reading Strategy	Writing Strategy	Vocabulary Strategy
<input type="checkbox"/> Two column notes <input type="checkbox"/> Guided note taking <input type="checkbox"/> Opinion-proof chart <input type="checkbox"/> Problem-solution chart <input type="checkbox"/> Venn diagram <input type="checkbox"/> Cause and effect frames <input type="checkbox"/> MVP Most Valuable Point <input type="checkbox"/> Creating metaphors <input checked="" type="checkbox"/> Other Worksheet	<input type="checkbox"/> EQW Experience/Questions/still wondering <input type="checkbox"/> KWL (word problem chart) <input type="checkbox"/> Five-Step Problem solving <input type="checkbox"/> Reciprocal teaching <input type="checkbox"/> Graphic Organizer <input type="checkbox"/> Anticipation/Prediction guides <input type="checkbox"/> Word Problem Roulette <input type="checkbox"/> Problematic Situation <input type="checkbox"/> Read-talk-write <input type="checkbox"/> Directed reading thinking activity <input type="checkbox"/> Other	<input type="checkbox"/> Learning Logs <input type="checkbox"/> Question/Answer Relationship <input type="checkbox"/> Question the Author <input type="checkbox"/> RAFT <input type="checkbox"/> Writing to Learn <input type="checkbox"/> Social-academic language translations <input type="checkbox"/> Graphic organizers <input type="checkbox"/> Outlining <input type="checkbox"/> Other:	<input type="checkbox"/> Frayer model <input type="checkbox"/> List-group-label <input type="checkbox"/> Semantic feature analysis <input type="checkbox"/> Word Sorts <input type="checkbox"/> Number Cubes <input type="checkbox"/> Cue Cards <input type="checkbox"/> Vocabulary self-awareness activity <input type="checkbox"/> Creating metaphors <input type="checkbox"/> Concept Definition Maps <input type="checkbox"/> Other

Strategies Rationale: Why are you selecting these support strategies? What will these help you and your students accomplish?

Agenda

Anticipatory Set: How will you support students in accessing prior knowledge, personal, real world, and/or cultural connections?

Warm up: An Introductory percent problem where the student will compute the sale price of a book

During: What support strategies will you use to scaffold students learning so they meet or exceed targeted objective?

Practice Activity: Shopping Spree

The student will go through sale ads and catalogs and create as many outfits as possible for under \$350.

The student will record the price of the item and the sale percentage onto the Shopping Spree Form and then compute the sale price of each item.

Wrap up/Closing: How will you engage students in self-assessment and/or reflection on key concepts taught?

Ticket out:

The student will complete a self assessment checklist on the progress made during the Shopping Spree activity.

Daily Assessment How do you know your students met your lesson objective(s)?

- ☐ knowledge
- ☒ comprehension
- ☒ application
- ☐ analysis
- ☐ synthesis
- ☒ evaluation

Formative:

- ☐ Class discussion
- ☐ CPS clickers
- ☐ Email teacher
- ☒ Entrance/Exit slip
- ☐ Teacher Observe
- ☐ Thumbs up, neutral, or down
- ☐ Homework check
- ☐ Listened to conversations
- ☐ Math Journal
- ☐ Quiz
- ☐ Video quiz
- ☐ Voting
- ☐ Whiteboard Check
- ☐ Other

Summative:

- ☐ Test
- ☐ Project
- ☐ Report
- ☐ Presentation
- ☐ Final Exam
- ☐ Other

Additional Teacher Preparation:

Copy:

Locate:

Use of Materials

- ☐ Teacher's Manual pg #
- ☐ Student Text pg #
- ☐ Picture Books
- ☒ Handouts: Warm up, Shopping Spree Form, and Ticket out Checklist
- ☐ Manipulative:

- | | |
|--|---|
| | <input type="checkbox"/> Related Equipment:
<input checked="" type="checkbox"/> Adapted materials: Sale Ads and Catalogs |
|--|---|

Additional Reference/Sources of Information:

Daily Reflection *This would be a section at the end for the teacher to note any strengths or weaknesses of the plan. What worked well? What needs to be changed for next year? What are the next steps for the students and how will you get them there?*