Teacher: Rachel Wraley **Room #:** **Lesson # in Unit:** **Date(s)** 4/25/13 **Period (s):** **Lesson Topic:**

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.G.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

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: Writes well and has a willingness to do problems.

Anticipated Challenges: Student reads 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?

The student doesn't understand why she is doing certain procedures when solving a problem so to help her gave more comprehension on why something is done, I'm having her writing out how she is solving each problem. I picked the T-Chart to be the method for her writing out the problems because she responded so well to the use of the chart before.

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

Strategies Rationale: Why are you selecting these support strategies? What will these help you and your students accomplish? I hope for my student to become more confident in reading math questions and creating algebraic and geomteric equations based on word problems.

Agenda

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

Warm up:

The student will do one introductory problem that involves measurements.

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

Practice Activity: How to T-Chart

The student will read through a question, write the problem down in the left-hand colum and then write how to solve the problem, in normal English, before actually computing an answer.

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

Ticket Out: Self-Assessment

The student will complete a checklist on the overall progress made during the Practice Activity.

Daily Assessment *How do you know your students met your lesson objective(s)?*	***Formative:***	**Summative:**
☒ knowledge ☒ comprehension ☒application ☐ analysis ☐ synthesis ☐ evaluation	☐ 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	☐ Test ☐ Project ☐ Report ☐ Presentation ☐ Final Exam ☐ Other

Additional Teacher Preparation:	**Use of Materials**
Copy: Locate:	☐ Teacher's Manual pg # ☐ Student Text pg # ☐ Picture Books ☒ Handouts: ☐ Manipulative:

	☐ Related Equipment: ☐ Adapted materials:

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?*

The lesson failed. The student got through the warm up and two of the eleven prepared activity practice problems. My goal had been to improve her writing in Math while trying to help improve her picture to equation, or vice versa, skills. Since she had responded so well to the T-Chart in the last lesson I planned on using that again, only problem was she didn't want to write the answer in direction format in English. She simply wanted to solve it. Most of the time when she goes straight into solving a word problem she doesn't understand what the problem is asking for so she gets the question wrong. By having her to write the How-to steps on the right side of the chart I thought that she would be forced to reason out why she was doing a particular step. It was unsuccessful. The next step is to work on slowing creating Math literacy and then getting her to be able to write about Math.