

Name: Rick Glass

***Mathematics: The Language of STEM***  
Addition Within 100 – Making 65

**CONTENT AND TASK DECISIONS**

**Grade Level(s):**

Grade 2

**Description of the Task:**

Building on previous learning in addition, students will use multiple addends to arrive at a given number.

**Indiana Mathematics Content Standards:**

2.CA.1

-Add fluently within 100

2.CA.2 (various parts)

-Addition with two or more addends

**Indiana Mathematics Process Standards:**

PS.1: Make sense of problems and persevere in solving them.

**Mathematics Content Goals:**

Students will develop an understanding of addition within 100 by investigating various strategies to arrive at a target number.

**Language Objectives:**

Vocabulary: addend, number sentence, sum, total, altogether.

Students will have multiple opportunities to speak and write with feedback throughout the exercise.

Learning will be enhanced through teamwork and questioning.

**Materials:**

20 Large cards, 5 x 7, numbered as follows: 5, 5, 5, 5, 5, 5, 10, 10, 10, 10, 10, 15, 15, 20, 25, 30, 35, 40, 45, 50.

(Based on a class of 20, one card per student. Adjust values and quantities as necessary)

**THE LESSON**

**Before:**

- Student Actions
  - Vocabulary review – Partners or small groups discuss meanings of the posted vocabulary; addend and number sentence. Include additional words as needed. Students are guided in sharing and understanding accurate definitions and applications of the words.
  - With paper/pencil, students explore different ways to make the number, 65. This warm-up activity may be accomplished individually or with partners.
  
- Teacher Actions
  - Review vocabulary and guide discussion. Provide guidance as necessary.

- Ways to make 65, paper and pencil - Teacher gives minimal instructions, allowing students to wrestle with their own understanding of the task.
- =65 is posted on the board in a way that allows multiple number sentences to be written ahead of it.

**During:**

- Student Actions  
Each student is given one card with a predetermined number.  
Students begin the process of creating number sentences by finding the partners with numbers that will add up to the target number.  
Students report to teacher with their number sentences.
- Teacher Actions
  - Distribute the Addend Cards; explain that students must find partners and create a number sentence that will total the specific number, 65.
  - Let them struggle while quietly observing.
  - Record the responses next to the =65.
  - A particular sentence should be used only once per round.
  - Review responses as activity wanes.
  - Repeat the process as time allows. Provide variety by eliminating or specifying a set number of addends. Use your imagination.
  - Note students who are less active in seeking partners. Adjust the activity to increase their participation.

**After:**

- Student Actions
  - Reflect verbally – explain their thinking as they created various number sentences.
  - Write reflections in Math Journals
- Teacher Actions
  - Guide Reflections
  - Guide the writing process.
  - Confer with struggling students and check for knowledge of vocabulary terms.
  - Restate the lesson objective: Students will learn to add fluently with 100.

**ASSESSMENT**

**Observe:**

- Are students accurately constructing number sentences that total the target number?
- Are all students actively involved in the process?
- Review journals to assess understanding of terms

**Ask:**

- What challenges did you have during the activity?
- What were the most/fewest addends you used in creating a number sentence?

**Written Assessment:**

- Write 3-5 number sentences that total 95. At least three addends must be used with each number sentence.