Art Subtraction

First Grade  |  Math  |  65 minutes  |  Standards: 1.OA.A.1
by Ginger Bruster  |  June 7, 2015

Practice subtraction with art! Help early learners grasp the concept of "taking away" using drawings. This lesson helps students work toward subtraction with numerals, and the mastery of simple shapes.

Learning Objectives
Students will be able to solve subtraction number sentences using art.

Materials and Preparation
- Plain white paper
- Sharp pencils
- Scissors
- Halved colored construction paper

Key Terms:
- number sentence
- subtraction

Lesson

Introduction (5 minutes)
- Gather students together at a table or in a group area. Students will work individually on this project, but will be in a group setting.
- Discuss simple shapes with your class. Request that students list off shapes they know, including circle, triangle, rectangle, and square.
Explicit Instruction/Teacher Modeling  (10 minutes)

- Draw or project simple shapes on the board, so the whole class can see them.
- Explain that today students will be using shapes to draw out a number sentence that focuses on subtraction.
- Define a **number sentence** as a math problem that uses numbers and symbols to write out a mathematical operation, such as subtraction. Remind your class that **subtraction** means to take one number or amount away from another.
- Give your class an example of a subtraction number sentence. For example: *25 squares minus 10 squares is 15 squares.* On the board, write out the number sentence: \(25 - 10 = 15\).

Guided Practice/Interactive Modeling  (20 minutes)

- Give each student a sheet of plain white paper.
- Have them draw small shapes (about the size of a dime) on the paper with a pencil. There is no limit to how many shapes, though starting out with 20 or less will make this learning experience easier to grasp.
- Instruct your students to trace one of their hands on a piece of colored construction paper and cut it out.
- Have each student count the shapes on their white piece of paper.
- Tell your class to cover the shapes with their hand print cutouts, and guess how many shapes are under the paper hand. Afterward, have them count the shapes under the paper hand.

Independent Working Time  (15 minutes)

- Encourage students to create a subtraction number sentence based on the exercise they just completed. For example, if one student started with 15 triangles, and then covered up 5 triangles, he would have 10 triangles left over. The number sentence for this equation would be: \(15 - 5 = 10\).
- Ask each student to write out their number sentence, or equation, in sentence format. For example: *I had 15 triangles. I covered up 5 triangles. There were 10 triangles left over.*
- Have each student complete at least three number sentences.
Extend

Differentiation

- **Enrichment**: Students who need more of a challenge may draw more shapes to create more difficult number sentences. They can also write out a written explanation of their number sentences.
- **Support**: Those who need extra help may stick with 20 shapes or less, depending on the student's level. Using physical manipulatives instead of drawings may also be more effective in grasping this concept.

Related Books and/or Media

- **GAME**: Subtraction Ski Race
- **GAME**: Subtraction Pizza Party

Review

Assessment *(10 minutes)*

- Assessment will be made through observations of the student's number sentences.

Review and Closing *(5 minutes)*

- When all students have completed their number sentences, have some of the students share them with the rest of the class.