

## Lesson Plan by Jen Beakas

**Lesson:** 12 Ways to Get to 11

**Length:** 90 minutes

**Age or Grade Level Intended:** 1<sup>st</sup> Grade

### Academic Standard(s):

Mathematics 1.2.1 Show the meaning of addition (putting together, increasing) using objects.

Mathematics 1.2.3 Show equivalent forms of the same number (up to 20) using objects, diagrams, and numbers.

English/Language Arts 1.1.3 Recognize that sentences start with capital letters and end with punctuation, such as periods, question marks, and exclamation marks.

### Performance Objective(s):

Given Unifix cubes of two different colors and a t-chart, student will write down at least 5 combinations of ways to make the number 11, creating an addition sentence out of each, with 100% accuracy. (Mathematics 1.2.1)

Given the book 12 Ways to Get to 11, a piece of white paper, and coloring tools, the student will draw their own way to get to the number 11, with the objects in their drawing adding up to the number 11 (Mathematics 1.2.3).

Given their drawing of a way to get to the number 11, student will write a sentence describing their drawing, with their sentence beginning with a capital letter, and ending with a punctuation mark. (English/Language Arts 1.1.3)

### Assessment:

The teacher will check to make sure the student has at least 5 combinations of ways to make the number 11 with a corresponding addition sentence on their t-chart. The teacher will also check the student's drawings for the classroom book to make sure that the objects in the picture add up to the number 11, and that the corresponding sentence is correctly capitalized and punctuated. If it is not, the drawing will be returned to the student to be corrected before it will be published in the class book.

### Advance Preparation by Teacher:

- Obtain a copy of the children's book 12 Ways to Get to 11 by Eve Merriam
- Get out enough Unifix cubes so that each student can have 11 of two different colors

- Make a copy of the t-chart for each student (see attached)
- Get enough white paper for each student to have one
- Get out coloring supplies (colored pencils, markers, crayons, etc.)
- Create a cover for the classroom book that the children are going to create together.
- Get out extra calculators for those students who may not have their own.

### **Procedure:**

#### **Introduction/Motivation:**

Remind students that we have been working on addition and writing addition sentences in math. Remind students that there are many addition problems and combinations of numbers that can result in the same sum. Take out 10 blue and 10 white Unifix cubes. Using these cubes, demonstrate the different ways that you can combine the two colors of cubes to still get 10. For example, 9 white cubes and 1 blue cube will equal 10 cubes. 5 blue cubes and 5 white cubes will equal 10 cubes. As you demonstrate each addition problem with the cubes, write the addition sentence on the blackboard (ex.:  $9+1=10$ ). Ask students to raise their hands and give other suggestions as to how to get the number 10 (**Bloom: Knowledge**). Inform students that today we are going to learn about different number combinations to get to the number 11.

#### **Step-by-Step Plan:**

1. Tell students that we are now going to read a book that talks about the different combinations of numbers that can give us a sum of 11. Read the story 12 Ways to Get to 11 by Eve Merriam out loud to students.
2. Give each student 11 Unifix cubes of one color and 11 Unifix cubes of another color. Pass out the attached t-chart (**Gardner: Intrapersonal**).
3. Instruct students to write the color of their first set of Unifix cubes above the first column of the t-chart and to write the color of their second set of Unifix cubes above the second column of the chart.
4. Tell students to use their Unifix cubes to come up with as many different ways to get a sum of 11 as they can (**Gardner: Bodily/Kinesthetic**). Tell students that they must find at least 5 different ways. As they go, have them fill in the t-chart by drawing the number of each color cube that they used and then writing the corresponding addition sentence in the space provided (**Bloom: Analysis**). Remind students that this is the same thing that was demonstrated with the number 10 (**Gardner: Logical/Mathematical**).
5. Have students get out their calculators, or borrow one from the teacher, to check to make sure that all of their addition sentences really do add up to 11.
6. Inform students that we are going to make our own classroom book based on the story 12 Ways to Get to 11.
7. Pass out a piece of white paper to each student and get out coloring supplies. Tell students to use the book as a guide to come up with their own creative way to get to the number 11 using objects. Give students the example that if they were at a

baseball park, 5 bats, 2 gloves and 4 balls would equal the number 11. Have students draw their way to get to the number 11 using the coloring supplies and the white paper. Remind them that they can also use the book as a reference, and that they can look at their chart they just completed to help them come up with number combinations that add up to 11 (**Gardner: Visual/Spatial**) (**Bloom: Application**).

8. After the students are done with their drawing, have them write a sentence about their picture at the top or bottom of the page. Give students the example of the baseball park again: "If you went to a baseball park, 5 swinging bats, 2 leather gloves, and 4 sailing balls would be 11." Emphasize to students that they need to use a capital letter at the beginning of the sentence and a punctuation mark at the end of the sentence (**Gardner: Verbal/Linguistic**) (**Bloom: Comprehension**).

#### **Closure:**

Collect the pictures that the students have drawn and bind them with the cover for the book that you have created (If you have 25 students in your class, you could title the book 25 Ways to Get to 11). Read the book that the class has written together out loud. After you have read the students the story they have created, show the students where you are going to keep the book, and invite them to read it when they want to during silent reading or free time.

#### **Adaptations/Enrichment:**

**Child with a Hearing Impairment:** Sit this child near the front of the classroom towards the teacher so that he or she is better able to hear. After instructions have been given to the entire class, ask the student to repeat what the instructions were to the teacher, so you know he or she has heard and understands what to do.

**Child with ADHD:** Allow this student to pass out materials such as the Unifix cubes, white paper, and coloring supplies to the rest of the class. This will allow the student to get out of his or her seat and move around.

**Child with mild cognitive disability:** Instead of having this student fill in the chart, have student work one on one with the teacher or an aide. Give this child an addition sentence, such as  $7+4$ , and ask them to demonstrate this with their Unifix cubes. If the student correctly demonstrates it, the teacher can assess it by making a check mark next to the problem.

**Child with an orthopedic impairment:** For many children with orthopedic impairments, manipulating the Unifix cubes may be difficult, because they are not very large and snap together. Give this student different objects, such as the mini plastic teddies, that they can use to help them create number sentences.

**Self-Reflection:** Did the students meet performance objectives? Did the students enjoy the activity? What other ways can I use math manipulatives, such as Unifix cubes, to teach math concepts? What could I do to improve this lesson the next time I teach it?

Name \_\_\_\_\_

