

29. Twelve Ways to Get to Eleven


- USE A NUMBER LINE TO DETERMINE A QUANTITY
- RECOGNIZE THAT DIFFERENT PAIRS OF ADDENDS CAN COMBINE TO MAKE THE SAME SUM
- REVIEW THE COMPONENTS OF A NUMBER SENTENCE

STUDENT NEEDS:

30 single blocks
number line (plastic or paper)
worksheets

TEACHER NEEDS:

copy of the book *12 Ways to Get to 11* (Simon & Schuster Children's, ISBN 0689808925)

 30 minutes

GROUP ACTIVITY:

Using the worksheets 1 and 2...

1. Review an example of a number sentence, reminding students that the answer is called the sum and that the numbers we add together are called addends.
2. Without showing the cover or mentioning the title of the book, begin reading *Twelve Ways to Get to Eleven*.
3. Read, "Pick up nine pinecones from the forest floor."
4. Students write the number 9 in the space for the first addend in the first number sentence.
5. Students place nine blocks on their number lines.
6. Continue to read, "and two acorns."
7. Students write the number 2 in the second space on their worksheet.
8. Students place two additional blocks on their number lines.
9. Ask what the total, or sum, is. (11)
10. Students write the number 11 to the right of the equals sign in the first number line.
11. Continue reading the book, stopping after each number is introduced. Give students time to write the number and to place that many blocks on their number lines.
12. At some point a student will say, "I bet it will be 11." Ask why he/she thinks that. Turn onto the cover and discuss the name of the book.
13. Explain that there is more than one way to create the same sum. Different combinations of addends can be used to create the same sum.

12 Ways to Make 11

1. $\underline{9} + \underline{2} = \underline{11}$

2. $\underline{6} + \underline{5} = \underline{11}$

3. $\underline{4} + \underline{5} + \underline{1} + \underline{1} = \underline{11}$

4. $\underline{4} + \underline{2} + \underline{2} + \underline{2} + \underline{1} = \underline{11}$

5. $\underline{6} + \underline{1} + \underline{1} + \underline{3} = \underline{11}$

6. $\underline{2} + \underline{1} + \underline{1} + \underline{4} + \underline{1} + \underline{1} + \underline{1} = \underline{11}$

7. $\underline{3} + \underline{2} + \underline{1} + \underline{5} = \underline{11}$

8. $\underline{1} + \underline{2} + \underline{4} + \underline{4} = \underline{11}$

9. $\underline{7} + \underline{2} + \underline{1} + \underline{1} = \underline{11}$

10. $\underline{3} + \underline{3} + \underline{3} + \underline{2} = \underline{11}$

11. $\underline{1} + \underline{10} = \underline{11}$

12. $\underline{5} + \underline{3} + \underline{2} + \underline{1} = \underline{11}$

HELPFUL HINTS:

Teacher should read the book first and understand the answer key (provided).

INDEPENDENT WORK:

My number is **18**

Here are 3 ways to make my number:

1. $\underline{6} + \underline{6} + \underline{6} = \underline{18}$
2. $\underline{10} + \underline{8} = \underline{18}$
3. $\underline{4} + \underline{3} + \underline{6} + \underline{5} = \underline{18}$

Answers will vary.

Using worksheet 3...

1. Each student picks a number between 10 and 30 and writes it at the top of the worksheet.
2. Students place that many blocks on a number line.
3. Students separate the blocks into three groups.
4. Ask, "If we put all the blocks back together, how many blocks would we have?"
5. Students count the number of blocks in each group and write the numbers as addends in the first number sentence on their worksheet.
6. Students write the total number of blocks (the number they picked) as the sum in the number sentence.
7. Repeat, separating the blocks into two addends, then four addends.

OPTIONAL EXTENSION:

1. Create a class book on large paper with student illustrations, such as Ten Ways to Find Twelve Animals at the Zoo or Nine Ways to Find Fifteen Things at the Beach.

Assessment:

DOES THE STUDENT:

- place the correct number of blocks on the number line for each addend
- read the total number of blocks on the number line correctly
- write the correct numbers in the number sentences
- break their number into three different combinations of addends

Differentiation:

EXTENSION:

- Students complete worksheet 3 without using blocks.

Name: _____

12 Ways to Make 11

1. _____ + _____ = _____

2. _____ + _____ = _____

3. _____ + _____ + _____ = _____

4. _____ + _____ + _____ = _____

5. _____ + _____ + _____ = _____

6. _____ + _____ + _____ + _____ = _____

Name: _____

7.	_____	+	_____	+	_____	+	_____	+	_____	=	_____
8.	_____	+	_____	+	_____	+	_____	+	_____	=	_____
9.	_____	+	_____	+	_____	+	_____	+	_____	=	_____
10.	_____	+	_____	+	_____	+	_____	+	_____	=	_____
11.	_____	+	_____	=	_____	+	_____	+	_____	=	_____
12.	_____	+	_____	+	_____	+	_____	+	_____	=	_____

Name: _____



My number is

Here are 3 ways to make my number:

$$1. \quad \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$2. \quad \underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$3. \quad \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$