Lesson 15: Solve Story Problems with Three Numbers

Standards Alignments

Addressing 1.OA.A.2, 1.OA.B.3, 1.OA.C.5, 1.OA.C.6

Teacher-facing Learning Goals

• Solve story problems within 20 with three addends, two of which make a ten.

Student-facing Learning Goals

• Let's solve story problems with 3 numbers.

Lesson Purpose

The purpose of this lesson is for students to solve story problems with three addends, two of which make a ten, in a way that makes sense to them.

In previous lessons, students solved Add To, Result Unknown and Put Together, Total Unknown story problems with two addends. They found all the combinations of 10. They applied the add in any order property to find sums. They learned that teen numbers are made up of a ten and some ones.

In this lesson, students solve story problems with three addends in a way that makes sense to them (MP1). In each of the problems, two of the addends make a ten. Students may apply the commutative and associative properties in order to make the problem easier to solve. Students write equations to represent the story problem (MP2), and draw a box around the answer to the problem. All students should be encouraged to make sense of the methods their classmates share (MP3). This allows teachers to see the vocabulary students use to describe their mathematical thinking (MP6).

The problems in this lesson were written around the context of birds. The inspiration for including the context of birds was Louis Agassiz Fuertes. Louis Agassiz Fuertes was a painter of birds in the early nineteen-hundreds. He was the first bird artist who painted live birds. He did not want to kill the birds in order to paint them so he challenged himself to learn how to paint quickly. He is responsible for painting most of the bird books in his era and he painted murals at the Museum of Natural History in New York City. Consider reading the book, The Sky Painter by Margarita Engle before the lesson.

Access for:

Students with Disabilities

• Engagement (Activity 2)



• MLR6 (Activity 1)

Instructional Routines

5 Practices (Activity 1), How Many Do You See? (Warm-up)

Materials to Gather

- Connecting cubes or two-color counters: Activity 1, Activity 2
- Double 10-frames: Activity 1, Activity 2

Lesson Timeline

Warm-up	10 min
Activity 1	20 min
Activity 2	20 min
Lesson Synthesis	10 min

Teacher Reflection Question

How did introducing Louis Agassiz Fuertes and his bird paintings support students as they engaged in story problems about birds? Why is it important for students to experience realworld contexts in math?

Cool-down (to be completed at the end of the lesson)

① 0 min

Unit 3, Section C Checkpoint

Standards Alignments

Addressing 1.OA.A.2, 1.OA.B.3, 1.OA.C.6

Student-facing Task Statement

Lesson observations

Student Responses

- Count on to find the sum.
- Make 10 to find the sum.
- Use known sums to adjust addends to find the sum.
- Apply the "add in any order property" to find the sum.
- Know certain sums.