28: One More Than My Double

Number of Students

Partner pairs

Materials

For each student:

- Student Rekenrek
- Paper and pencil or whiteboard and marker

For the teacher:

- Large Number Cards 1–10 (pages 108–110)

Overview

In this activity, students use a fact strategy to find one more than a specified double on their Rekenreks.

$4 + 4 + 1 = 9$

Common Core State Standards

Content Standards:

Grade Level: K

Domain: Operations and Algebraic Thinking (K.OA)

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Grade Level: 1

Domain: Operations and Algebraic Thinking (1.OA)

Work with addition and subtraction equations.

8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = ? - 3$, $6 + 6 = ?$

Practice Standards:

2. Reason abstractly and quantitatively.

Students are learning to make sense of quantities and understand what subtraction means as they focus on basic subtraction facts.

6. Attend to precision.

Students are accurately finding the missing addend for a sum of 10 or a sum of 20.

Presenting the Activity

1. Make a copy of the Large Number Cards 1–10 and cut the cards apart.
2. Distribute a Rekenrek and pencil and paper, or whiteboard and marker, to each student.
3. Say to students:

   "You are going to work together to play "One More Than My Double."

   I will show you a number from 1 to 10.

   You and your partner will work together to determine one more than the double of the number I show you.

   Then one of you will write an addition number sentence to show your answer.

   Here is an example card. (Show 4.)

   So, each of you show 4 on your Rekenrek.

   Now, double 4 by moving another 4 beads.

   Then add 1 bead. What is your answer? (9)

   Now, on your paper, write $4 + 4 + 1 = 9$ or $4 + 5 = 9$.

   We will continue until all the cards have been used.

4. Note that $10 + 10 + 1 = 21$ cannot be shown on student Rekenreks.
5. Discuss with students how they determined their sums.
6. Discuss with students doubles plus 2.
7. Discuss with students doubles plus 1 for numbers greater than 20.

Assessing Student Responses

The following questions will help you assess your students' responses to the activity:

- Did the students correctly double the number of beads and add one?
- Did the students write the correct addition number sentences?
- Did any numbers cause difficulties?

Large Number Cards 1–4

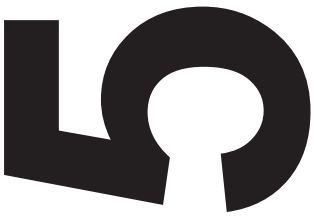
2

4

1

3

Large Number Cards 5–8



Large Number Cards 9–12

10

12

9

11

Train Trip

Number of Students

Entire class with partner pairs

Materials

For each student:

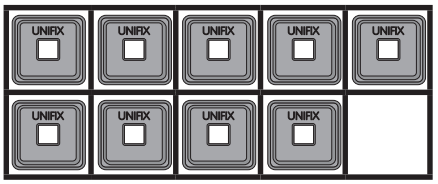
- Ten-Frames Template

For each pair of students:

- 30 Unifix Cubes

For the teacher:

- "Train Trip" Word Problem Cards



Looking out the train window I saw 6 robins, 2 bluebirds, and a crow.

How many birds did I see in all?

Overview

In this activity, students solve word problems about traveling on a train that involve the addition of three whole numbers. The word problems are read by the teacher or may be read by the students, if able.

Presenting the Activity

1. Reproduce the "Train Trip" Word Problem Cards and cut the cards apart.
2. Reproduce the Ten-Frames Templates, per partner pair.
3. Group the students into partner pairs.
4. Distribute the Ten-Frames Template to each partner pair.
5. Distribute 20 Unifix Cubes per partner pair.
6. Distribute 5 additional Unifix Cubes to each student.
7. Say to the students:

> Student 1 will begin by using Unifix Cubes on the ten-frames to solve the problem. Here is an example:
>
> *Lashonda takes 4 books to read on her train trip. Her brother Franco takes 5 books with him and her other brother Mario takes 6 books. How many books did the children take to read on the trip?*

8. Demonstrate how to use the cubes to solve the problem, or have Student 1 fill the ten-frames.
9. Say to Student 1:

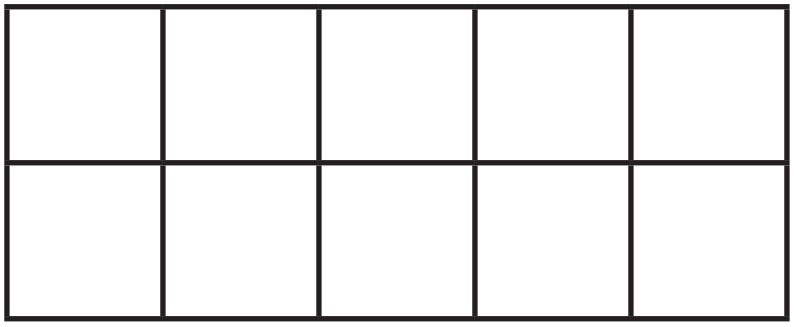
> By placing the cubes on the ten-frame, how many books did the family take on the trip?
>
> If you solve a problem correctly on your turn, you will be given a Unifix cube to begin creating a Unifix train.

10. Give Student 2 a word problem to solve, and repeat the process.
11. The activity concludes when you have completed 3–5 rounds. The student with the longest train is the winner.

Assessing Student Responses

- The following questions will help you assess your students' responses to the activity:
- Did the student(s) correctly model each addition problem with the cubes and ten-frames?
- Did the student(s) use the appropriate terminology such as *added to*, *joined*, or *equals?*
- Did the student(s) state the correct sum for each word problem?
- Did the student(s) use any noticeable fact strategies in finding the sums?
- If a student answered several word problems incorrectly after showing the model correctly, was any pattern evident?

Ten-Frames Template



"Train Trip" Word Problem Cards

The train traveled 13 miles before the first stop, 4 more miles before the second stop, then 3 more miles and stopped at Union Station. How many miles did the train travel?

I love to eat carrots on my trip. I ate 5 carrots for my morning snack, 3 carrots at lunch, and 2 more carrots for dinner.

How many carrots did I eat on my trip?

For my long train trip, I took 3 balls, 1 stuffed animal, and 2 board games to play.

How many toys did I take with me?

Sitting near me on my trip, I saw 7 boys, 5 girls, and 4 mothers.

How many people did I see?

Looking out the train window, I saw 6 robins, 2 bluebirds, and 1 crow.

How many birds did I see in all?

Before boarding the train, I saw 5 red railroad cars, 11 blue railroad cars, and 4 yellow railroad cars.

How many railroad cars did I see altogether?

Looking out the train window, I saw 15 white buildings, 2 brown buildings, and 1 black building.

How many buildings did I see altogether?

On my trip I sang 4 songs, my brother sang 4 songs, and my sister sang 3 songs.

How many songs did we sing in all?

The conductor told us we would arrive in 4 minutes. He said it would take us 8 minutes to unload and 5 minutes to get our suitcases. How many minutes in all?

On my trip, I wrote 7 notes to my friends, 1 note to my teacher, and 1 note to my grandmother.

How many notes did I write in all?