**Grade 1 Quarter 1 Day 41**

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|  **1.OA.1** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.**1.OA.4** Understand subtraction as an unknown-addend problem. For example, subtract 10 - 8 by finding the numberthat makes 10 when addedto 8**.****1.OA.5** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). |
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Materials Needed:

Math Expressions Volume 1

TE pp. 265-278

MathBoards

Vocabulary

Nickel

Penny

Apart

Pattern- A way in which numbers or drawings are related to one another that allows predictions about the next number or drawing

###### Math Expressions Lesson

Unit 3 Lesson 9: Practice with Subtraction Stories (Activity 1)

Unit 3 Lesson 10: Addition Stories with Unknown Totals (Activity 1 & Challenge Activity Card)

Activity 1 (Lesson 9)

Present this story problem for children to solve by any method: We saw 10 kangaroos. Then 4 of them jumped away. How many kangaroos are left? Invite two or three students to explain their methods.

Suggest that students draw a Math Mountain to represent the kangaroo story on MathBoards. Ask guiding questions using TE p. 266. Have children create their own subtraction stories then have the class solve each one representing each with a Math Mountain and an equation. *Subtraction story problems can involve change situations where there is an initial amount and then some get taken away and then the rest are left at the end. Subtraction problems can also tell about a total that is broken apart into two groups. If no children make up any story like this present this problem: Father made 7 sandwiches. He put 3 on Julie’s plate and the rest on Dan’s plate. How many were on Dan’s plate?* Have students try to make up problems similar to this where the total is broken apart.

Activity 1 (Lesson 10)

Use the Solve and Discuss structure for the story problem: I took 4 rides on the roller coaster. My sister took 5. How many roller coaster rides did we take in all? Have several children solve the problem at the board and explain their solutions.

Invite several children to draw the Math Mountain that corresponds to the story above then discuss the partners and totals. Ask guiding questions on TE p. 272 to facilitate a discussion.

Challenge Activity Card from Lesson 10

Students write an addition or subtraction equation for numbers less than 10 (3+7=10)

Students then write theirown word problem about pancakes that corresponds to the equation. (Ex- I made 3 blueberry pancakes and 7chocolate chip pancakes. How many pancakes did I make in all?)

Additional Teacher Notes:

**1.OA.4**: Teacher will need to specifically emphasize subtraction as an unknown addend problem during this lesson. For example, subtract 11-7 by finding the number that makes 11 when added to 7.

Children may know the partners of certain numbers, or they may use a thinking strategy to find the answer quickly. Be sure everyone knows how to count on, but do not insist they do so, if they can use a faster method.

Homework

Homework p. 87

Assessment

 I have 8 baseball cards. I give 2 away. How many cards are left?

**Grade 1 Quarter 1 Day 42**

**1.OA.1** Use addition and subtraction within

20 to solve word problems involving

situations of adding to, taking from, putting

together, taking apart, and comparing, with

unknowns in all positions, e.g., by using

objects, drawings, and equations with a

symbol for the unknown number to represent

the problem.

**1.OA.3** Apply properties of operations as

strategies to add and subtract.

**1.OA.4** Understand subtraction as an

unknown-addend problem. For example,

subtract 10 - 8 by finding the numberthat

makes 10 when addedto 8**.**

**1.OA.5** Relate counting to addition and

subtraction (e.g., by counting on 2 to add 2).

Materials Needed:

Math Expressions Volume 1

TE pp. 279-284

SAB pp. 107-108

Vocabulary

Unknown partner

Unknown total

###### Math Expressions Lesson

Unit 3 Lesson 12: Stories with Mixed Unknowns

Activity 1

Ask children to turn to SAB p. 107. After children look at the first cartoon discuss ways that the unknown number can be found. (counting on, drawing a Math Mountain, or writing an equation). Use guiding questions on TE p. 280 to facilitate a discussion. For the second cartoon, have children explain how they plan to find the answer. Use Math Talk in Action on TE p. 281 to lead a discussion. Move to the third cartoon and solve it in the same way, having children make a plan and then use it to solve the problem. Conclude that story problems like these either have an unknown partner or an unknown total.

Activity 2

Present story problems listed on TE p. 281 for students to solve independently. Have them plan whether they need to find a partner or a total. Then have volunteers explain their solutions at the board.

Going Further

Read question one on SAB p. 108 pointing out that the strategy to solve the problem is provided: Write an equation. Have students complete the problem independently. Write the equation on the board and discuss how the equation models the information from the problem. Have children complete the rest of the page and have them share their solutions, discussing how they created and solved their problems. Ask: *How did you decide if the problem would have an unknown total or an unknown partner?*

Additional Teacher Notes:

* **1.OA.3-** Teacher will need to specifically emphasize the properties of operations as strategies to add and subtract in this lesson.
* **1.OA.5-** Teacher will need to specifically emphasize the relationship between counting and addition and subtraction in this lesson.

Children should recognize how the problems are different and similar. They should be able to apply one of several different strategies to solve the story problems independently.

Assessment

How can you tell if a problem has an unknown partner or an unknown total?

How does a Math Mountain (or equation) help you solve a problem?

Homework

Homework p. 91

**Grade 1 Quarter 1 Day 43**

**1.OA.1** Use addition and subtraction within

20 to solve word problems involving

situations of adding to, taking from, putting

together, taking apart, and comparing, with

unknowns in all positions, e.g., by using

objects, drawings, and equations with a

symbol for the unknown number to represent

the problem.

**1.OA.3** Apply properties of operations as

Strategies to add and subtract.

**1.OA.4** Understand subtraction as an

unknown-addend problem. For example,

subtract 10 - 8 by finding the numberthat

makes 10 when addedto 8**.**

**1.OA.5** Relate counting to addition and

subtraction (e.g., by counting on 2 to add 2).

**Materials Needed:**

* Math Expressions Volume 1
	+ TE pp. 285-288
	+ SAB p. 109
	+ Count-On Cards
	+ Intervention Activity Card 3-13
	+ TRB M93

###### Math Expressions Lesson

***Unit 3 Lesson 13 Addition & Subtraction Game***

*(Activity 1 Only and Intervention Activity Card)*

**Activity 1**

1. Have students play the game as before, but use Number Quilt 3. Number Quilt 3 has all the numbers 3-10 in order. The goal is to place each card in its correct space on the quilt. Have students use whichever deck is at their practice level. Before children play, review the Counting On strategy, discussing counting on to add and to subtract. Have children give examples and explain how to count on to find an unknown total and an unknown partner.

**Intervention Card**

1. Give each child a copy of Story Match Worksheet (TRB M93). Have children work together to read each story and match it to the appropriate Math Mountain.

**Additional Teacher Notes:**

* **1.OA.3-** Teacher will need to specifically emphasize the properties of operations as strategies to add and subtract in this lesson, as Math Expression does not make that connection for students.
* **1.OA.4-** Teacher will need to specifically emphasize subtraction as an unknown addend problem during this lesson. For example, subtract 11-7 by finding the number that makes 11 when added to 7.
* This activity gives teachers an opportunity to work individually with children who need extra help.

Assessment

Draw a Math Mountain for the equation 3 + \_\_\_\_ = 9. Then solve the equation and the Math Mountain. *Taken from Writing Prompt on TE p. 287*

**Grade 1 Quarter 1 Day 44**

**1.OA.1** Use addition and subtraction within 20 to

solve word problems involving situations of adding

to, taking from, putting together, taking apart,

and comparing, with unknowns in all positions,

e.g., by using objects, drawings, and equations with

a symbol for the unknown number to represent

the problem.

**1.OA.4** Understand subtraction as an unknown

addend problem. For example, subtract 10 - 8 by

finding the numberthat makes 10 when addedto 8**.**

**1.OA.5** Relate counting to addition and

subtraction (e.g., by counting on 2 to add 2).

**1.OA.6-** Add and subtract within 20, demon-

strating fluency for addition and subtraction within

10. Use strategies such as counting on; making ten

(eg. 8+6=10+4=14); decomposing a number leading

 to a ten (eg. 13-4 = 13-3-1=10-1=9); using the

 relationship between addition and subtraction

(eg. knowing that 8+4=12; 12-4=8); and creating

equivalent but easier or known sums (eg. adding

6+7= 6+6+1=13).

**1.OA.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 these*

*equations: 8+?=11; 5=\_\_-3; 6+6=\_\_*

Vocabulary

Unknown partner

Unknown total

**Materials Needed:**

* Math Expressions Volume 1
	+ TE pp. 289-295
	+ SAB p. 111
	+ MathBoards
	+ Nickel strips

###### Math Expressions Lesson

***Unit 3 Lesson 14: More Practice: Mixed Unknowns***

**Activity 1**

1. Present the story problems on TE p. 290 to the students. Have children retell each in their own words to support understanding. Have several children show their work at the board while explaining their methods. Model math talk with questions: *Where is the total in your drawing? Where is the partner? What was the 6 in the story?* Have children make up mixed types of word problems and solve them.
* **NOTE:** Omit the problem about Jessica.

**Activity 2**

1. See Unit 3 Lesson 5 for description of *The Number Grabber.* Invite 5 children to the board and have each draw a Math Mountain with all three numbers. Select one child as the Number Grabber. That child erases one of the totals or partners while others have their eyes closed; then the class identifies the missing number. During this activity ask *Did the Number Grabber erase a total or a partner?*
2. Have five children write addition equations in horizontal form on the board. Have the Number Grabber erase either a total or a partner. Discuss using the counting on strategy to find the missing number.
3. **Going Further**
4. Read Subtraction Fun and Adding It Up as indicated on TE p. 292. Discuss how the author uses pictures to show addition and subtraction stories.
5. Have children solve each equation on SAB p. 111 and cut out one addition and one subtraction equation. Have children draw a picture for each equation after gluing the equations on drawing paper.

**Additional Teacher Notes:**

* Draw a Math Mountain and label is partner, partner, total for students to refer to throughout the lesson as they are solving problems.

Assessment

How do you know when to subtract in a story problem? How do you know when to add? Explain.

**DAY 45!!!!!**

 **Okie dokie ---Assessment** (1.OA.1, 1.OA.3, 1.OA.4, 1.OA.5) sample items of Day 45 assessment on CMAPP