**There are sample items to assess for day 23 on CMAPP!!!!!**

Grade 1 Quarter 1 Day 24

***Heads up y’all-----this is an ALIGNMENT LESSON***

## Common Core State Standard(s)

**1.OA.5** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2

**Materials Needed:**

* Cubes
* Student Math Boards
* Blackline Masters *“Connecting*

*Addition and Subtraction”,*

*“Representing a Situation”*

**Assessment**

* Blackline Master *“Connecting (\*\* these are in our handouts from the county!!!)*

*Addition and Subtraction*

**Homework**

* Blackline Master *“Representing a (\*\* these are in our handouts from the county!!!)*

*Situation”*

Vocabulary

Addition

Subtraction

Equation

Equal

###### **Alignment Lesson**

***Connecting Addition and Subtraction***

1. Show students a tower of 8 cubes. Ask students to close their eyes as you break off 3 and hide behind your back.
2. Ask students to open their eyes and look at the tower.
3. Guide them to a subtraction sentence with these starters:

* *How may did I start with? (8)*
* *How many do you see? (5)*
* *How many hidden? (3)*

Write the number sentence 8-5=3

***Note: Students’ making the connection between addition and subtraction is extremely important for mastering subtraction facts.***

1. Because the cubes for the unknown part are left hidden behind the back (when doing these problems) encourage children to think about the hidden part – *What goes with the part I see to make it whole?*
2. In the problem above, the whole tower of cubes is 8, and 3 are removed. The students are likely to think in terms of “5 and what make 8?” or “What goes with 5 to make 8?” This mental activity is “thinking with addition” instead of the “count what’s left” approach. Write the number sentence 5+3=8 on the board. Ask students how the addition and subtraction number sentences are alike and different.

*Later, when working with subtraction facts, a subtraction fact such as 8-5 = \_\_ should trigger the same thought pattern: “5 and what makes 8?”*

1. Repeat several times with the total tower of cubes not exceeding 10.
2. Pair students and give each pair one tower of ten cubes. Students take turns being the leader.

* Leader shows a tower with a selected number of cubes, then removes and hides part of the tower while the partner closes his eyes.
* Partner opens his eyes and figures out the hidden number. Students write the addition and subtraction sentence on their student math board.
* Partners switch roles and repeat.

1. Allow time for a few student pairs to share their work.
2. Students should complete Blackline *Master “Connecting Addition and Subtraction”*. You may use this as an assessment.
3. Assign Blackline Master *“Representing a Situation”* for homework.

**Grade 1 Quarter 1 Day 25**

## Common Core State Standard(s)

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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.5** Relate counting to addition and  subtraction (e.g., by counting on 2 to add 2) |

**Materials Needed:**

* Math Expressions Volume 1
  + TE pages 177-182
  + SAB page 67

MathBoard materials

**Assessment**

* As children are working, ask questions such as: “How do you know how many to cross out?” and “How do you know how many are left?”

**Homework**

Homework page 57-58

Vocabulary

* Minus
* Minus sign (-)

###### **Math Expressions Lesson**

###### Unit 2 Lesson 11: Introduction to Subtraction

**Activity 1**

1. Invite children to act out a scenario that allows them to visualize

subtraction. Ask 6 children to go to the front of the room.

Explain that they are swimming in a lake. Present the following

math story problem and have 4 children “dry off” and leave the

scene. “6 people are swimming. Then 4 of them go home.

How many people are still swimming?”

2. Discuss the action of the story and that there are fewer people

swimming after 4 went home and 2 are still swimming.

3. Guide children in representing the same story problem by

drawing a picture on their MathBoards.

4. Explain that it is better to cross out the number of people that

went away rather than erase them because if we erase them, we

cannot see the whole story, only the ending.

5. Suggest to children that it is easier to cross out the correct

number if they draw the break-apart line first.

6. Next, introduce children to the term *minus*. Use the word in

context of the swimming story and explain its meaning. Say,

“6 people, 4 go home, 2 people are left. Another way to say it

is: 6 people minus 4 people equals 2 people. Minus means we

took something away.”

7. Show the class the minus sign in the context of an equation.

Ask the children to write the equation as they say, “6 minus 4

equals 2.” (See TE page 179 for a model of the equation).

8. Present the problem, “We have 8 apples. Then we eat 5 of

them. How many apples do we have now?”

9. Have children solve the problem on their MathBoards by

drawing a picture and writing the equation.

10. Have volunteers come to the board to share their solutions.

11. Remind children to give a complete answer with the number

(“You said 3. Is it 3 worms? No, 3 apples”).

**Activity 2**

1. Have the class work together on SAB page 67.

2. Ask children to look at the 8 apples at the top of the page and

tell the apple story again and have everyone cross out the

correct number of apples. Write the result in the box.

3. Be sure everyone understands that they start with the total and

take away one of the partners. The answer is always the other

partner. Have children identify which number is the total and

which numbers are the partners.

5. Complete the remaining exercises as a class.

**Grade 1 Quarter 1 Day 26**

## Common Core State Standard(s)

|  |
| --- |
| **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.5** Relate counting to addition and  subtraction (e.g., by counting on 2 to add 2)  **1.OA.7-** Understand the meaning of the  equal sign, and determine if equations  involving addition and subtraction are  true or false. For example, which of the  following equations are true and  which are false? 6=6, 7=8-1, 5+2=2+5,  4+1=5+2  **Materials Needed:**   * Math Expressions Volume 1   + TE pages 183-188   + SAB page 69   + MathBoard materials |

**Assessment**

* As students are solving subtraction equations, ask, “How do you know which number is the total?” and “How can you find the two partners in a subtraction equation?”

**Homework**

* Homework page 59-60

Vocabulary

* Subtract
* Subtraction
* Minus
* Solve

###### **Math Expressions Lesson**

###### Unit 2 Lesson 12: Subtraction with Drawings and Equations

**Activity 1**

1. Write the following problem on the board:

I saw 9 robins in a tree. Then 5 of them flew away. How

many robins are still in the tree?

2. Invite children to use a circle drawing to solve the

problem on their MathBoards. Demonstrate how to draw

the circle drawing at the board and have everyone show

the subtraction equation on top and the answer below (See

TE page 184).

3. Ask the class to identify the total and the partners,

reminding students that 4 is one of the partners.

4. Give the class 2 or 3 more subtraction stories and ask

children to use circle drawings to find each answer.

5. Encourage children to give a complete answer that

includes a label. Continue to identify the total and

partners each time. Use the word *minus* as you discuss

each problem.

**Activity 2**

1. Invite a volunteer to write 2+3=5 on the board. Review equality

with the children and remind them of the meaning of the

equals sign.

2. Say the equation together and have a second volunteer show

that it is a true number sentence by making a circle drawing for

each side. Ask, “What does the equals sign tell us?” and “How

can we prove that these two sides are really equal?”

3. Explain to children that because there are 5 circles on each side

of the equals sign, the number sentence is true and is an

equation.

4. Next, write a subtraction equation on the board (ex. 6-2=4) and

ask a volunteer to make a “proof” drawing.

5. Explain that because there are 4 circles remaining on one side

of the equals sign, and 4 on the other side, it is a true number

sentence.

6. Focus on the terms subtract and subtraction and have

children use the words in context.

7. Lastly, turn to SAB page 69 and have students read the words

below the circles. Remind them of the meaning of the word

subtract and have them cross out the correct number of circles.

8. Guide children as they write the correct equation on the line

provided. Ask them to identify the total and the two partners.

9. As children complete the other problems on the page, have them

use the word subtract as often as possible.