**Grade 1 Quarter 1 Day 18**

## Common Core State Standard(s)

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|  **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 139-144

MathBoard materials

Giant Number Cards 1-10

Number Cards 1-10

Vocabulary

Counting on

###### Math Expressions Lesson

###### Unit 2 Lesson 5: Explore Solution Methods

**Activity 1**

1. Write the equation 6+2=\_\_\_ on the board. Have children

 write the equation on their MathBoards and solve in any

 way they can.

2. Explain that the empty box is the unknown total and we

 need to be detectives to find it. Ask, “How can we find

 this number?”

3. Choose 4 or 5 children to work at the board and show

 how they would find the unknown total.

4. Have the children explain their solution methods.

 Encourage the children at their seats to ask questions or

 offer helpful suggestions. Example: “I did it the same

 way as John did it.” Ask students, “Did anyone do it a

 different way?”

5. Give a few more addition exercises with unknown totals.

 Validate any solution methods that have accurate results.

 Notice any examples of counting on and start Activity 2

 by referring to these children’s solution methods.

**Activity 2**

1. Have children line up their Number Cards in order across

 their desks with the numeral side up. Ask two volunteers

 to line up the Giant Number Cards in order on the board

 ledge.

3. Show children the difference between counting all and

 counting on, using the Giant Number Cards (see TE pg.

 141)

4. Ask children to find the Number Cards 5 and 4 and write

 the equation 5+4= \_\_\_ on the board.

5. Place the dot sides of Giant Number Cards 5 and 4 side

 by side as children do the same at their desks. Say, “Let’s

 count all the dots to find the total.” “This is the long way

 to find a total. Today we’ll learn a shorter way.”

6. Turn over the 5 card to show the numeral. Ask, “Do you

 have to count 5 dots to know this is 5?” (no) Tell

 children we pretend we already counted 5 and say “5” and

 then count on four more (5: 6, 7, 8, 9).

7. Introduce the term *counting on* and that it is a shortcut.

8. Present another addition exercise (ex. 5+3=\_\_\_) and have

 children solve it by counting on with Giant Number

 Cards. Do at least 10 problems together for practice.

**Additional Teacher Notes:**

* Incorporate number lines as a strategy.

Assessment

* As children use the number cards, check their ability to mentally think the first number and count on to reach the total. Ask, “Where do you start counting?” and “How would you explain counting on to a friend?”

**Homework**

* Homework pages 45-46

**Grade 1 Quarter 1 Day 19**

## Common Core State Standard(s)

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| --- |
| **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 145-150
	+ SAB page 53

MathBoard materials

Vocabulary

Above

Below

Total

Equation

###### Math Expressions Lesson

###### Unit 2 Lesson 6: Addition Strategies: Counting On

**Activity 1**

1. Explain to children that instead of using Giant Number Cards,

 we can draw dots to count on.

2. Write the addition equation 4+6=\_\_\_ on the board and

 show the class how to count on by drawing their own

 dots or circles. Note that the numbers corresponding to

 the dots are spoken, not written.

3. Give the class another addition equation with a missing

 total and have them solve it on their MathBoards by

 drawing dots or circles to count on. When they have

 found the total, have them write it in the empty box. (See

 TE pg. 146 for a visual of how to correctly draw dots).

4. Explain to children that there is a shorter way to count on

 with dots by putting little dots right above the second

 number as you count on (See TE page 146). Have

 children solve several equations using this strategy and

 have volunteers share their solutions at the board.

**Activity 2**

1. Ask children if anyone used the method of using their

 fingers to count on instead of dots. Ask a volunteer to

 demonstrate how they used this strategy.

2. Add 6+3 with fingers as a class. Say, “We know that we

 have 6 and so we only need to count on 3 more.” “Think

 6 in your mind and put up 3 fingers and use them to count

 on from 6. 6: 7,8,9.”

3. Together with the class, solve at least 6 more examples

 such as 5+4, 8+2, and 7+2.

4. Ask children, “Why is using your fingers a good way to

 count on?” (possible answer: I use my mind and my

 fingers, so I don’t need a pencil. I can add anywhere. It’s

 the fastest way.)

5. Have students create story problems for at least 3

 counting on problems. Children may need help with

 asking the question at the end of the story problem.

6. Finally, have students work on SAB page 53

 independently. Students may count on by drawing dots or

 by using fingers. You may want to model exercise 10

 with the class using actual objects.

**Additional Teacher Notes:**

* Incorporate number lines as a strategy. Focus is on addition.

Assessment

Ask students to model counting on to find the total for equations such as 7+2, 5+5, and 6+3

**Homework**

* Homework page 47-48

**Grade 1 Quarter 1 Day 20**

## 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:**

* Math Expressions Volume 1
	+ TE pages 151-158
	+ SAB page 55
	+ Real or Play Money

Vocabulary

Penny

Nickel

Cent

Coin

Cost

Equation

###### Math Expressions Lesson

###### Unit 2 Lesson 7: Nickels, Pennies, and Counting On

**Activity 1**

1. Give each child 2 nickels and 5 pennies. Introduce these coins

 by name and ask children to share what they know about

 a nickel and how many pennies it is worth.

2. Explain that 1 nickel is worth 5 pennies. You can help children

 remember this by relating a nickel to a hand (5 fingers) and a

 penny to a single finger.

3. Next, introduce the term cent. Explain that a nickel is worth 5

 cents and a penny is worth 1 cent. Write the symbol for cents

 on the board and have children practice writing the symbol on

 their MathBoards.

4. Have children show 1 nickel and 2 pennies in a row. Discuss

 how to determine how many cents they have. Explain, “If a

 nickel is worth 5 cent and a penny is worth 1 cent you can

 count on or use your fingers.”

5. Ask children to use their favorite method to count how many

 cents they have. It is important to elicit different strategies

 from children. Some may count on immediately and others

 may still be learning that 5 pennies make a nickel.

6. Invite children to show other combinations of a nickel and

 extra pennies and encourage children to use mental math to

 count on.

7. Show different combinations of coins and have a volunteer

 write each total on the board with the cents symbol. End by

 having children show 2 nickels.

**Activity 2**

1. Turn to SAB page 55 and have children cut out the Nickel Strip

 and fold it along the solid line. The Nickel Strips can

 help children remember that 5 pennies make 1 nickel.

2. Discuss the Nickel Strip with the class and encourage children

 to take their real nickels and pennies and relate them to the

 strip.

3. Demonstrate how to use the nickel side of the Nickel Strip and

 real pennies to find the answers for Exercises 1 and 2.

4. Relate exercise 2 to adding 5+3 by counting on.

5. Suggest children use a Nickel Strip and pennies for 3-5.

6. Next, show the class how to draw nickels and pennies using

 circles and numbers (see TE page 155).

7. Explain that the number 5 stands for a nickel and the number 1

 stands for a penny. Have them note the size of the circles they

 draw (the nickel circle is larger than the penny circle).

8. Have children draw various amounts between 5 and 10 cent

 and invite several volunteers to draw at the board.

**Additional Teacher Notes:** Focus on Addition

Assessment

* Have students show that they understand the value of nickels and pennies by asking questions such as, “You have 1 nickel and 2 pennies. How many cents do you have?”

**Homework**

* Homework page 49-50

**Grade 1 Quarter 1 Day 21**

## 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:**

* Math Expressions Volume 1
	+ TE pages 159-164
	+ SAB page 57
	+ Paper Plates
* Vocabulary
* Up
* Down
* Count on
* Greater number
* Nickel
* Cent

###### Math Expressions Lesson

###### Unit 2 Lesson 8: Count On from the Greater Number

**Activity 1**

1. Write 2+8=\_\_ on the board. Have children begin at 2 and

 count on in unison to find the total. Help children see that this

 method is tedious. Discuss finding an easier way. “Can

 anyone think of an easier way to count on to find the total?”

2. Remind children that they can add 2 numbers in any order

 (switch the partners). Then have them count on from the

 greater number.

3. Help children see that the total is the same either way

 (2+8 or 8+2).

4. Have children look at exercise 1 on SAB page 57. Tell

 them to find the greater number and underline it. Tell

 students, “When you underline the 7, it helps you to keep

 the number 7 in your mind. Then use dots to count on

 from there.” (See TE page 160 for a model)

5. Have the class complete the page through exercise 6. For

 exercises 7 and 8, remind children that the nickel has a

 greater value than the penny, so they should start with the

 nickel and count on from 5.

6. After students complete exercise 9, call on volunteers to

 share their explanations.

**Activity 2**

1. Children will be playing, “Pancake Breakfast.” Place a

 stack of 10 paper plates (“pancakes”) near the front of the

 room.

2. Ask two children to come forward and pretend to make

 some pancakes.

3. Have each child count aloud as he or she takes plates

 from the stack. Example: Child 1: “I am making 1,2,3

 pancakes.” Child 2: “I am making 1,2,3,4,5 pancakes.”

4. Invite the class to write the appropriate addition equation

 at their desks. Ask a volunteer to write the equation on

 the board.

5. Ask, “What numbers will we add to find how many

 pancakes we have altogether?” (3 and 5) “Let’s write the

 equation: 3+5=\_\_\_.” Direct children as they count on to

 find the total.

6. Have children start with the greater number (5) and

 underline the 5 and count on to find the total (8).

7. Then have the two “pancake makers” line up their plates along

 the ledge of the board so the class can check the answer.

8. Play several more rounds of the game appointing new “pancake

 makers” each time.

Assessment

* Give students several equations and ask “Which is the greater partner in the equation?” and “How can you count on to find the total?”

**Homework**

* Homework page 51-52

**Grade 1 Quarter 1 Day 22**

|  |
| --- |
| **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 pages 165-170
	+ SAB page 59-62
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Vocabulary

Number Quilt

Red Count-On Cards

Count on

Unknown Total

###### Math Expressions Lesson

###### Unit 2 Lesson 9: Addition Game: Unknown Totals

**Activity 1**

1. Introduce the class to the general format of the red count-on cards. One side shows an equation without the total. The other side gives the same equation with the total. It also shows a counting-on drawing. (See TE page 166).

2. Point out the cut across the corner of each card which

 allows children to stack the cards so they are turned the

 same way.

3. Have everyone stack the cards so the side with the empty

 total box is showing.

4. Next, explain how The Number Quilt Game is played.

 The goal of the game is to place each card in its correct

 space on the Number Quilt.

5. To set up the game, mix the red count-on cards and place

 them so that the equation sides without the total are face

 up.

6. To play, children read the equation on the first card and

 find the total. Then they place the card on the quilt in the

 section that corresponds to the total. The small numbers

 in the corners allow children to continue placing cards

 even after the large central numbers have been covered.

 (See TE page 167 for a model of how the game is played).

7. The game ends when all of the cards have been placed on

 the quilt.

8. Children should confirm correct placement by picking up

 the cards in each section and turning them over to reveal

 the complete equations.

**Additional Teacher Notes:**

* Focus on addition.
* Save the Red Count-On Cards. The Number Quilt Game will be played again in future lessons.

Assessment

* As students are playing The Number Quilt game, ask questions such as, “What strategy did you use to find the total?” and “How do you know the cards are in the correct place on the Number Quilt?”

**Homework**

* Homework page 53-54