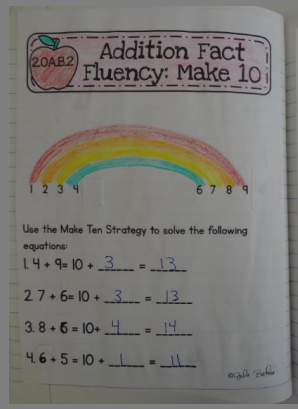
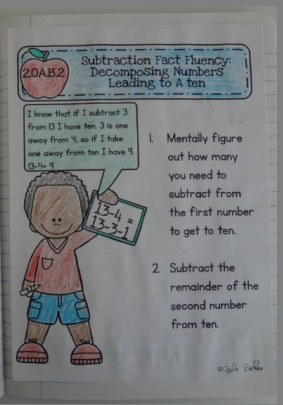
Math

Interactive Journal

2.OA.B.2, 2.OA.C.3, 2.OA.C.4

Operations & Algebraic Thinking





2nd

Math

Interactive Journal

2.OA.B.2, 2.OA.C.3, 2.OA.C.4

Operations & Algebraic thinking

Table of contents

Exit Tickets are included for each standard

*To fit pages in a composition Notebook shrink pages to 80% under Printer Preferences.

Interactive Journal

Fact Fluency

2.OA.B.2

Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one- digit numbers.

2OA.B.2 Addition Fact Fluency: Counting On

1. Put the biggest number in your head. Say it.
2. Count the small number on your fingers.

4+6=

1. 3 + 8= 11

2. 7 + 5= 12

3. 2 + 13= 15

4. 9 + 6= 15

5. 6 + 8= 14

6. 4 + 9= 13

2OA.B.2 Subtraction Fact Fluency: Counting Up

1. Put the smallest number in your head. Say it.
2. Count up on your fingers until you get to the large number.

17-9= 8

1. 15 - 8= 7

2. 12 - 5= 7

3. 18 - 13= 5

4. 9 - 6= 3

5. 16 - 8= 8

6. 14 - 9= 5

2OA.B.2 Addition Fact Fluency: Make 10

Use the Make Ten Strategy to solve the following equations:

1. 4 + 9 = 10 + 3 = 13

2. 7 + 6 = 10 + 3 = 13

3. 8 + 6 = 10 + 4 = 14

4. 6 + 5 = 10 + 1 = 11

2OA.B.2 Subtraction Fact Fluency: Decomposing Numbers Leading to A ten

1. Mentally figure out how many you need to subtract from the first number to get to ten.

2. Subtract the remainder of the second number from ten.

I know that if I subtract 7 from 17 I have ten 7 is 2 away from 9, so if I take 2 away from ten I have 8

17-9 =
17-7-2

I know that if I subtract 4 from 14 I have ten 4 is 4 away from 8, so if I take 4 away from ten I have 6

14-8 =
14-4-4

I know that if I subtract 5 from 15 I have ten 5 is 2 away from 7, so if I take 2 away from ten I have 8

15-7 =
15-5-2

I know that if I subtract 2 from 12 I have ten 2 is 5 away from 7, so if I take 5 away from ten I have 5

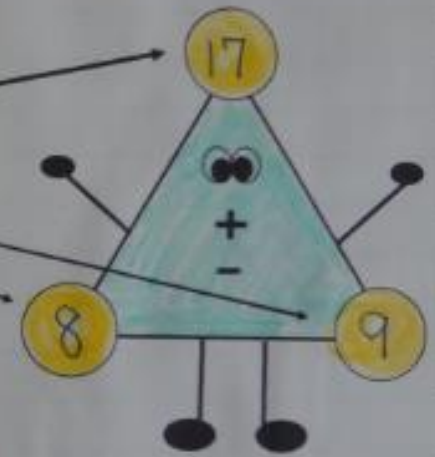
12-7 =
12-2-5

2.OA.B.2

Fact Families

The Largest Number in the family goes on the top.

The two smaller numbers go on the bottom corners.



If you know you addition facts, you know your subtraction facts. Addition and Subtraction facts belong to the same family!

9 + 8 = 17

8 + 9 = 17

17 - 9 = 8

17 - 8 = 9

Known Equivalent Sums

2OAB2

If you know basic facts, you can quickly combine numbers to solve a multi- number equation quickly.

6 + 6 + 3=

12 + 3 = 15

7 + 3 + 4=

10 + 4 = 14

8 + 5 + 5= 18

8+ 10 = 18

6 + 4 + 6=

10 + 6 = 16

Exit Ticket:

Explain how you would solve the equation N-7:

I would mentally say the fact family. I know that 7+7=14, therefore 14-7=7

How did I do?

1 + 1 =

4

3 + 3 =

4 + 4 =

5 + 5 =

12

fac

7 + 7 =

16

DOU

9 + 9 =

20

Interactive Journal

Odd and Even Numbers

2.OA.C.3

I can determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

2.OA.B.2 Pairing Objects

If a group of objects is even, every object will have a partner. If a group of objects is odd, there will be one object that is left out.

Mr. Diaz assigned a project for his students to work in partners. Partner up the children to determine if each number is even or odd.

1 student: even or odd ? odd

2 students: even or odd ? even

3 students: even or odd ? odd

4 students: even or odd ? even

5 students: even or odd ? odd

Using the pattern from above, determine if Mr. Diaz would have an even or odd amount of students:

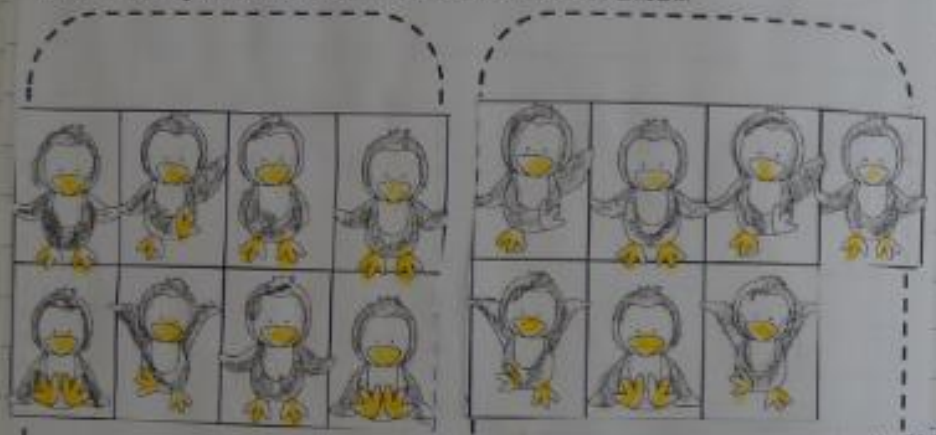
6 students: (even) or odd?
8 students: (even) or odd?
10 students: (even) or odd?
12 students: (even) or odd?
14 students: (even) or odd?
16 students: (even) or odd?
18 students: (even) or odd?
20 students: (even) or odd?

7 students: even or (odd)?
9 students: even or (odd)?
11 students: even or (odd)?
13 students: even or (odd)?
15 students: even or (odd)?
17 students: even or (odd)?
19 students: even or (odd)?

2.OA.B.2 Equal Groups

An even number will have an equal amount of objects in each group. An odd number will not have an equal amount of objects in each group.

Cut out the Penguins to determine if there is an even or odd amount.



15 is odd

Exit Ticket:

Determine if the following numbers are even or odd with a strategy of your choice:

- 8 even
- 13 odd
- 16 even
- 20 even
- *Bonus- 594 even

How did I do?

Interactive Journal

Addition to Represent Arrays

2.OA.C.4

I can use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

2OA.C.4

I can use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

C
R O W
L
U
M
N

ARRAY
ARRAY

addends

5 + 5 + 5 + 5 = 20 ← sum

2OA.C.4

I can use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Help Katie write an addition equation to help her find the sum of the cupcakes she baked.

5 + 5 + 5 + 5 + 5 = 25

3 + 3 + 3 + 3 + 3 = 15

or

5 + 5 + 5 = 15

Exit Ticket:

Write two addition equations that represent the candy bar array below and show the sum of the number of pieces of chocolate:

3 + 3 + 3 + 3 = 12

4 + 4 + 4 = 12

How did I do?



Credits

www.scrappindoodles.com
http://melonheadzillustrating.blogspot.com
http://gingersnapstreatsforteachers.blogspot.com/2011/08/graphics-galore.html
Clip Art created by Jeanette Baker @ Jason's Online Classroom (www.teacherspayteachers.com/store/Jasons-Online-Classroom