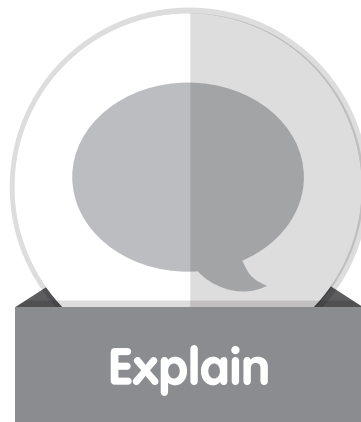
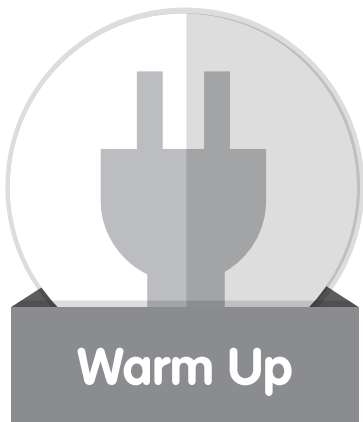


MATH GAMES

FOR THE COMMON CORE

Grade 2

Operations • Algebraic Thinking • Base Ten • Fractions



Gail Gerdemann with Kathleen Barta

Table of Contents

Teacher Notes

Introduction	iv
Materials	v
Bibliography.....	v
Standard Overview Chart.....	vi
About the Authors	vii

Game 2-1 Fast Facts

Fluency (Addition to 20)	2-5
<i>CCSSM: 2.OA.2</i>	

Game 2-2 What's the Difference?

Connecting Addition and Subtraction	6-9
<i>CCSSM: 2.OA.2</i>	

Game 2-3 What Number Do I Have?

Fluency (Subtraction to 20)	10-14
<i>CCSSM: 2.OA.2</i>	

Game 2-4 Skipping Around

Counting and Skip Counting	15-19
<i>CCSSM: 2.NBT.2, 2.NBT.8</i>	

Game 2-5 Everything Has Its Place

Place Value; Comparing Numbers	20-24
<i>CCSSM: 2.NBT.1, 2.NBT.4</i>	

Game 2-6 Visiting Tens - Addition

Introducing Open Number Lines (+)	25-29
<i>CCSSM: 2.NBT.5, 2.NBT.7</i>	

Game 2-7 Visiting Tens - Subtraction

Using Open Number Lines (-)	30-33
<i>CCSSM: 2.NBT.5, 2.NBT.7</i>	

Game 2-8 Chunks Make It Easy

Fluency Using Multiples of Ten (+/-) ...	34-38
<i>CCSSM: 2.NBT.5, 2.NBT.7</i>	

Game 2-9 Three in Any Row - Addition

Fluency (Addition to 100)	39-43
<i>CCSSM: 2.NBT.5</i>	

Game 2-10 Three in Any Row - Subtraction

Fluency (Subtraction to 100)	44-48
<i>CCSSM: 2.NBT.5</i>	

Game 2-11 What's My Secret Number?

Addition/Subtraction Relationship.....	49-51
<i>CCSSM: 2.NBT.5, 2.NBT.9</i>	

Game 2-12 It All Adds Up

Multiple Addends	52-55
<i>CCSSM: 2.NBT.6</i>	

Blackline Masters

.....	57-74
-------	-------

Game Rules	75-87
------------------	-------



Fast Facts

GAME
2-1

Learning Objectives

Focus on addition facts with numbers 6-9, and practice all facts within 20 for speed.

Content Standard

Fluently add and subtract within 20 using mental strategies. (CCSSM: 2.OA.2)

Prerequisite Skills

Students should be fluent, or nearly fluent, with adding within 10.

Math Vocabulary

decompose

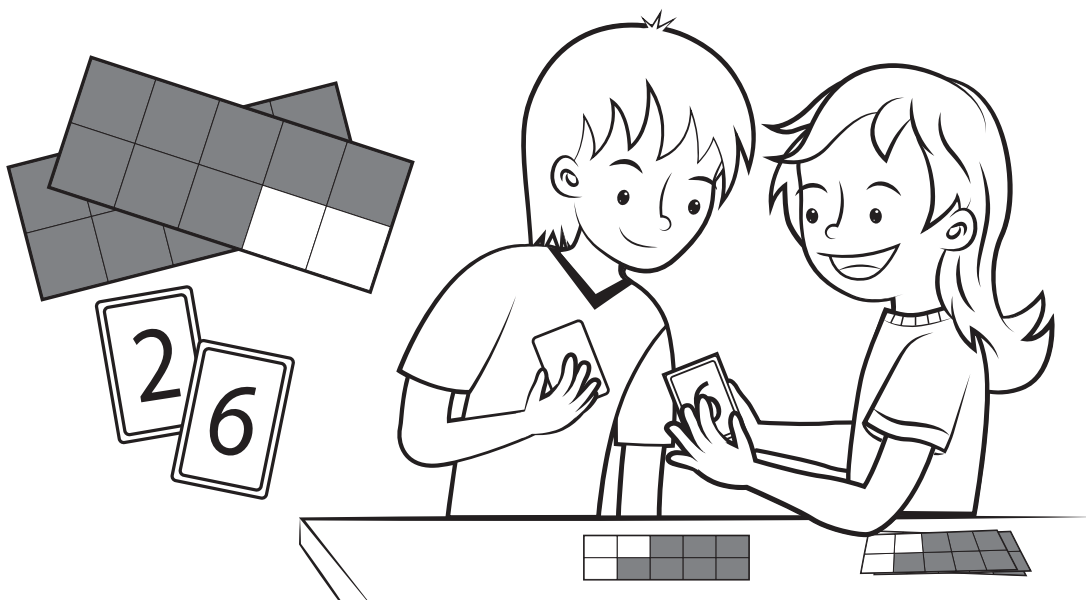
sum

Materials

For each pair of students:

- Deck (2 sets) of Number Cards 0-10 (page 70)
- Ten-Frame Cards (page 58)
- Student-made "+" symbol cards

Warm-Up	"Fast Facts" Game
✓	✓
✓	✓
	optional



Warm-Up A

- Materials:**
- Deck (2 sets) of Number Cards 0–10 (page 70)
 - Ten-Frame Cards for numbers 7, 8, and 9 (page 58)

Directions:

1. Students work with a partner. The partners sit side by side and take turns.
2. Place the Ten-Frame Card for 9 on the table between the two students.
3. A student draws one Number Card (for example, 6) to add to the 9.
4. Both students imagine a way to decompose 6 to make it easy to add to 9. For example, “Nine needs one more to make a 10, so if I take one from the 6, leaving 5, it’s easy to add 10 and 5 to make 15.”
5. The student says the sum and how he/she figured it out. (The student may use Ten-Frame Cards to help explain.) Then the student places the card that was drawn (6) in the discard pile.
6. The students repeat steps 1–3, but alternate which student starts. They continue until all the cards have been drawn.

Warm-Up B

Directions:

1. Start with the Ten-Frame Card for 8.
2. Students follow the steps outlined above, but imagine how they could decompose the second number to make it easy to add to the 8.

Warm-Up C

Directions:

Start with the Ten-Frame Card for 7. Students make their own visual strategy. (One strategy could include focusing on the fives structure. For example, with $6 + 7$ a student might notice a full 5 in each addend and $1 + 2$ extras.)

Note: These warm-up exercises may be repeated as many times as needed.

Explaining the Game: Fast Facts

Number of Players: 2

Materials:

- Deck (2 sets) of Number Cards 0-10 (page 70)
 - Ten-Frame Cards (page 58)
 - 3 student-made "+" symbol cards for each player (optional)
- (Note: Some students may need to put a "+" symbol between the cards so they see the cards 8 and 7 as "8 + 7", not as "87.")

Object: Add two numbers to get the largest sum.

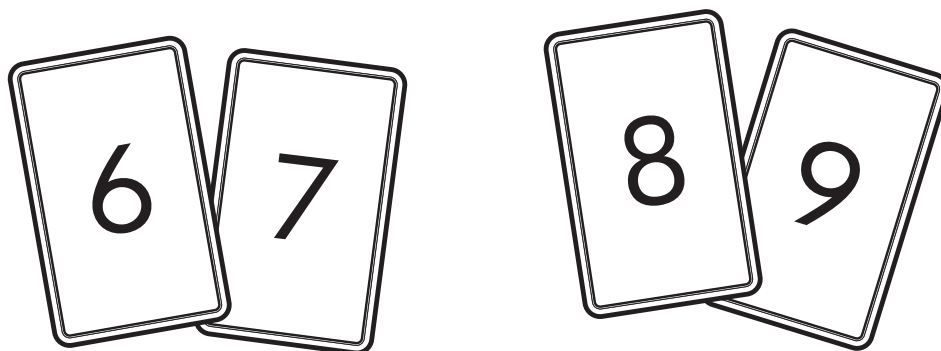
How to Play:

1. Each player draws two cards and mentally adds those numbers together.
2. The player says the sum.
3. If the sum is less than 11, the player draws another card. Repeat, as needed, until the sum is 11 or more.
4. The player with the larger sum wins all the cards.
5. If it is a tie, repeat steps 1-3, and the winner takes all the cards.

Variation

The player with the smaller sum wins.

(Note: Players may use Ten-Frame Cards to check their sums.)



Differentiation

More Support

- Begin by substituting Ten-Frame Cards for Number Cards in the Warm-Up and game. When students are ready, use Number Cards.
- When using the Number Cards, have the Ten-Frame Cards available as a tool.

More Challenge (Above grade-level)

- Draw three Number Cards. Add the numbers together in any easy way. For example: $7 + 4 + 3 = (7 + 3) + 4 = 14$. (Note: This challenge can encourage the use of the Commutative and Associative Properties.)

Deepening the Understanding

Ask the class:

If you need to add $6 + 8$, how could you think about the two addends to make the addition easier?

Would you decompose either one, or is there another strategy that helps?

Besides using ten-frames, how do you picture numbers in your head?

Mathematical Practices (CCSSM)

MP2 Reason abstractly and quantitatively.

MP7 Look for and make use of structure.

MP2 Reason abstractly and quantitatively.