Name_____

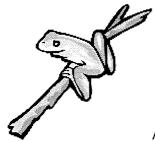
Solve these facts.

Name____

Name____

Name









Mathematical Thinking at Grade 2

Give Me 10!





Family Connection

Students are learning more and more about the structure of the base-ten numeration system. (10 is one of several important "landmark" numbers. Others include multiples of 10, such as 100 and 1000.) One way you can help your child with math is to be "on the lookout" with him or her for the many ways in which numbers are used in day-to-day life.

1 Find as many ways as you can to make 10.

By adding numbers

By subtracting numbers

2 Can you write ten in another language?



Don't worry if you can't!

Mathematical Thinking at Grade 2

Side by Side

1 Finish this side-by-side chart. Find all the ways to make 10 by adding two numbers.

Famil			

Students are continuing to record different strategies for combining two numbers. You might encourage your child to work out the different ways to make 10 using beans or pennies. You can help your child recognize the patterns in the chart by asking simple prompting questions: "Do you see where some numbers go down? Do you see where other numbers go up?"

Ways to	Make 10		
10 + 0	0 + 10		
9 +	+ 9		
+ 2	2 +		
7 +	3 +		
+ 4	4 +		
5 +	+ 5		
4 +	+ 4		
3 +	+ 3		
2 +	+ 2		
1 +	+ 1		
0 +	+ 0		

2 What is different about the middle (shaded) row?

What patterns do you see in the two columns? Mathematical Thinking at Grade 2

Give Me 20!



Family Connection

One of the Classroom Routines built into the **Investigations** curriculum is "Today's Number." In this routine, which is done daily (or almost daily), students write number combinations that equal the number of days they have been in school. Consider playing "Today's Number" at home from time to time, perhaps using and referring to the current date on the calendar.

1 Find as many ways as you can to make 20.

By adding

$$10 + 10$$

By subtracting

Mixed Review and Test Prep

2 Which number combination does **not** make 20?

$$20 - 0$$

$$20 - 20$$

$$30 - 10$$

Coins, Coupons, and Combinations

What Will You Need?

Complete each sentence.

Family Connection

Students have been playing **Tens Go Fish**, a game that helps them learn the number pairs that make 10. After your child completes this page about number combinations, you may wish to play a different number-combination game by using a set of 10 pennies and a paper cup: "There are 4 pennies on the table, so there must be 6 pennies inside the cup. 4 cents and 6 cents is 10 cents."

- 1 If I have 4, I will need _____ to make 10.
- 2 If I have 6, I will need _____ to make 10.
- 3 If I have 3, I will need _____ to make 10.
- 4 If I have 7, I will need _____ to make 10.
- 5 If I have 2, I will need _____ to make 10.
- 6 If I have 8, I will need _____ to make 10.
- 7 If I have 1, I will need _____ to make 10.
- 8 If I have 9, I will need _____ to make 10.
- 9 If I have 5, I will need _____ to make 10.
- 10 If I have 0, I will need _____ to make 10.

Mixed Review and Test Prep

11 Which number combination does **not** make 20?

$$10 + 10$$

$$18 + 2$$

$$19 + 3$$

$$5 + 5 + 5 + 5$$

(A)

- B
- (C)

(D)

31

Coins, Coupons, and Combinations

Ways to Make 10

How many ways can you make 10?

Family Connection

Each student has begun to make a **Book of 10**. In these books, students list all the ways to make 10 using from two to ten addends. Ask your child to tell you about his or her book. Then give your child 10 pennies to use in finding different combinations of 2, 3, 4, and 5 numbers that make 10. (In class, each student works with 10 interlocking cubes.)

1 Using 2 numbers

2 Using 3 numbers

3 Using 4 numbers

4 Using 5 numbers

Turn Over 10

Materials: Deck of Number Cards 0–10 (four of each) plus four wild cards

Players: 2 to 3

How to Play

The object of the game is to turn over and collect combinations of cards that total 10.

- 1. Arrange the cards face down in four rows of five cards. Place the rest of the deck face down in a pile.
- 2. Take turns. On a turn, turn over one card and then another. A wild card can be made into any number.

If the total is less than 10, turn over another card.

If the total is more than 10, your turn is over and the cards are turned face down in the same place.

If the total is 10, take the cards and replace them with cards from the deck. You get another turn.

- 3. Place each of your card combinations of 10 in separate piles so they don't get mixed up.
- 4. The game is over when no more 10's can be made.
- 5. At the end of the game, make a list of the number combinations for 10 that you made.

Tens Go Fish

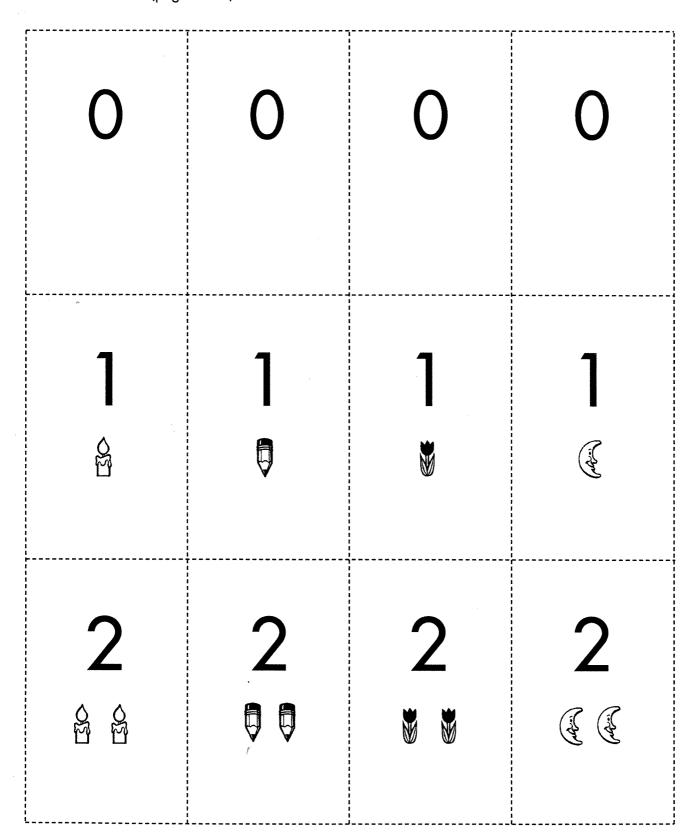
Materials: Deck of Number Cards 0–10 (four of each) with wild cards removed

Players: 3 to 4

How to Play

The object of this game is to get two cards that total 10.

- 1. Each player is dealt five cards. The rest of the cards are placed face down in the center of the table.
- 2. If you have any pairs of cards that total 10, put them down in front of you and replace those cards with cards from the deck.
- 3. Take turns. On a turn, ask <u>one</u> other player for a card that will go with a card in your hand to make 10.
- 4. If you get a card that makes 10, put the pair of cards down. Take one card from the deck. Your turn is over.
 - If you do not get a card that makes 10, take the top card from the deck. Your turn is over.
 - If the card you take from the deck makes 10 with a card in your hand, put the pair down and take another card.
- 5. If there are no cards left in your hand but still cards in the deck, you take two cards.
- 6. The game is over when there are no more cards.
- 7. At the end of the game, make a list of the number pairs you made.



]
3 8888	3	3	3
4	4	4	
5	5	5	5

6	6	6	6 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
7 公司	7		
8	8	8	8 (