Board Games for Early Mathematics: Addition

Step by step learning resources for individuals or pairs to use with a helper.

Start at the beginning, and stick to the order given. Skipping is OK if a learner can use the concepts to solve problems. For tips, background info, and an assessment to show if a different section would help, visit ReckonMath.com.

This packet includes these addition games and activities:

Think about what addition is

Identify addition facts you can learn better

Add on a number path What is the next number?

Add 1, frames, 0-5 Add 1, frames, 5-10 Add 1, numerals

Count by twos on even numbers to 20

Add 2 to an even number

Count by twos on odd numbers to 21

Add 2 to an odd number

Doubles are easy to remember

1+2 = 2+1 (Commutative property of addition)

A number plus 0 is the same number

Add 10 to make a -teen Take away 1, frames, 1-5 Take away 1, frames, 5-10 Take away 1, numerals

Numbers that add to 4 and 5, dot clusters Numbers that add to 5 and 6, dot clusters Numbers that add to 6 and 7, dot clusters Numbers that add to 7 and 8, dot clusters Numbers that add to 8 and 9, dot clusters Numbers that add to 9 and 10, dot clusters Numbers that add to 10 and 11, dot clusters Numbers that add to 11 and 12, dot clusters

Use odds and evens in addition Tens partners, introduction

Tens partners of smaller numbers Tens partners of larger numbers

Tens partners addition facts, numerals

(10+1) + 9 is the same as 10 + (1+9) (Associative

property of addition) Change 3+4 into 3+3+1

Add 3 and 4

Change 4+5 into 4+4+1

Add 4 and 5

Change 3+5 into 4+4

Add 3 and 5

Change 5+6 into 5+5+1

Add 5 and 6

Change 5+7 into 5+5+2

Add 5 and 7

Change 3+6 into 4+5 Change 3+6 into 3+3+3 Change 6+3 into 10–1

Add 3 and 6

To add 9, make 10. What's left? Smaller addends To add 9, make 10. What's left? Larger addends

Add 9 by making 10, smaller addends Add 9 by making 10, larger addends Take away 2, frames (Prepare to add 8) Take away 2, numerals (Prepare to add 8)

To add 8, make 10. What's left?

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Step by step learning resources for individuals or pairs to use with a helper.

Start at the beginning, and stick to the order given. Skipping is OK if a learner can use the concepts to solve problems. For tips, background info, and an assessment to show if a different section would help, visit ReckonMath.com.

This packet includes these addition games and activities:

LIST CONTINUED FROM PREVIOUS PAGE

Add 8 by making 10

Change 7 into something you can use

Change 7 into something you can use, includes 10 - 3

Add 7 by changing it into something you can use

Add 6 by choosing the best strategy

Check how well you have learned the addition facts

1 plus what is the number you drew?

2 plus what is the number you drew?

3 plus what is the number you drew?

4 plus what is the number you drew?

5 plus what is the number you drew?

6 plus what is the number you drew?

7 plus what is the number you drew?

8 plus what is the number you drew?

9 plus what is the number you drew?

Add 10 to any 2-digit number

Add two 1-digit numbers

Add a 1-digit number to a number from $10\ to\ 15$

Add a 1-digit number to a number from 15 to 20

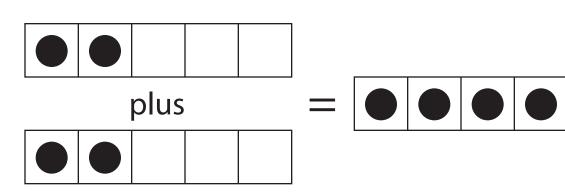
Add multiples of 10

Add multiples of 100

Think about what addition is

The amounts on the left and the right are the same because _

plus =



Look at the frames above the line. Can you and your partner figure out why there is an equals sign there? Hint: "Equals" means "is the same as". One of you, use words to tell your partner why the amount on the left of the equals sign is the same as the amount on the right of the equals sign. Now look at the frames that are below the line. Switch roles. Whoever listened the last time, now you are the talker. Use words to tell your partner why the amount on the left of the equals sign is the same as the amount on the right of the equals sign.

Identify addition facts you can learn better

I know this right now. / I could find the answer.

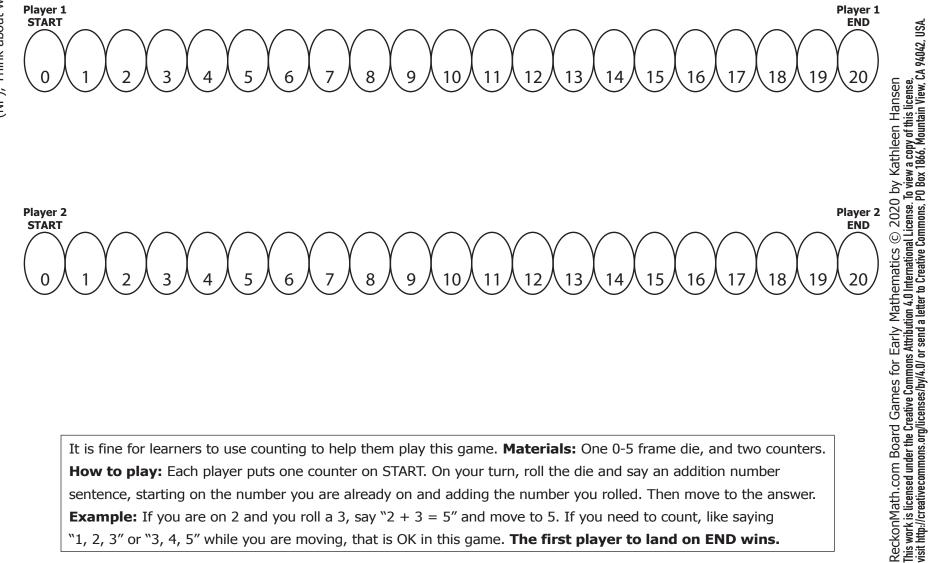
	1	2	3	4	5	6	7	8	9	10
1	1+1	1+2	1+3	1 + 4	1 + 5	1+6	1 + 7	1+8	1+9	1 + 10
2	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8	2+9	2 + 10
3	3+1	3+2	3+3	3 + 4	3 + 5	3+6	3+7	3+8	3+9	3 + 10
4	4+1	4+2	4+3	4+4	4 + 5	4+6	4+7	4+8	4+9	4+10
5	5+1	5 + 2	5+3	5 + 4	5 + 5	5+6	5+7	5+8	5+9	5 + 10
6	6+1	6+2	6+3	6+4	6 + 5	6+6	6+7	6+8	6+9	6 + 10
7	7 + 1	7 + 2	7 + 3	7 + 4	7 + 5	7+6	7 + 7	7 + 8	7 + 9	7 + 10
8	8+1	8 + 2	8+3	8 + 4	8 + 5	8+6	8 + 7	8+8	8+9	8 + 10
9	9+1	9+2	9+3	9+4	9+5	9+6	9+7	9+8	9+9	9 + 10
10	10 + 1	10 + 2	10 + 3	10 + 4	10 + 5	10 + 6	10 + 7	10 + 8	10 + 9	10 + 10

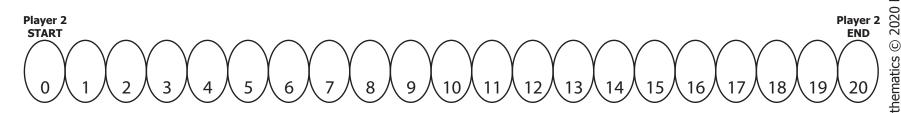
learners who already know some addition facts and want to figure out which ones to focus on. Note: An expression is a part of a number sentence, like "3 + 5" or "8". **Materials:** A pencil. What to do: For each square, ask yourself what the expression in the square equals. If you know the answer pretty soon, write a Y (for Yes) or a check mark. If it would take you a while to figure out the answer, write an N (for No) or leave the square blank. **Example:** If the expression is 3 + 5, that equals 8. If you knew 3 + 5 = 8pretty soon, write a Y or a check mark. If you didn't, write an N or leave the square blank. When you are done, you will have a chart of the facts you feel like you know well and the facts you can still learn better. Note to helper: Or, use this in conversation to find out which facts a learner needs to learn. Ask the facts in a random order.

This activity is appropriate for

Add on a number path

plus is





It is fine for learners to use counting to help them play this game. **Materials:** One 0-5 frame die, and two counters. How to play: Each player puts one counter on START. On your turn, roll the die and say an addition number sentence, starting on the number you are already on and adding the number you rolled. Then move to the answer. **Example:** If you are on 2 and you roll a 3, say "2 + 3 = 5" and move to 5. If you need to count, like saying "1, 2, 3" or "3, 4, 5" while you are moving, that is OK in this game. The first player to land on END wins.

Skill Builders: Count up from different numbers, 0-9 (NP)

What is the next number?

The number I rolled is _____. The next number is _____.

10 5 9 4 1 2 8

(7)(3)(1)(6)(2)(7)(10)

(9)(6)(3)(8)(5)(4)(3)

(7)(1)(6)(10)(9)(2)(9)

(1)(6)(4)(8)(5)(3)(7)

(2)(10)(6)(3)(1)(10)(2)

You know how to say "1, 2, 3, 4, 5, 6, 7, 8, 9, 10." In this game, you practice getting a number and saying the number that comes next. **Materials:** One ten-sided die, and counters in two colors. **How to play:** On your turn, roll the die. If you roll a zero, it means zero. Cover the next number after the number you rolled. **Example:** If you roll a 6, the next number is 7, so cover a 7. **The first player to get four in a row wins.**

Add 1, frames, 0-5

_ plus | is _____.

5	1	2	3	1
4	6	1	5	4
6	3	FREE SPACE	4	2
3	4	6	2	5
2	5	3	1	6

Adding 1 to a number is just like saying the number that comes next. Materials: One 0-5 frame die, and counters in two colors. How to play: On your turn, roll the die. Add 1 to that number and say what you are doing as an addition problem. Cover the answer. If the answer is not available, it is the other player's turn. Example: If you roll a 2, say "2 + 1 is 3" and cover a 3. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Add 1, frames, 5-10

___ plus l is _____.

11	6	9	7	6
8	10	11	6	8
7	6	FREE SPACE	10	7
9	7	9	8	11
10	11	8	9	10

Adding 1 to a number is just like saying the number that comes next. Materials: One 5-10 frame die, and counters in two colors. How to play: On your turn, roll the die. Add 1 to that number and say what you are doing as an addition problem. Cover the answer. If the answer is not available, it is the other player's turn. Example: If you roll a 6, say "6 + 1 is 7" and cover a 7. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Skill Builders: What is the next number? (A), Add 1, frames, 0-5 (A), Add 1, frames, 5-10 (A)

CCSS.MATH.CONTENT.K.CC.B.4.C Skill Builders; \

Add 1, numerals

_ plus l is _____.

 10
 5
 9
 4
 1
 2
 8

 7
 3
 1
 6
 2
 7
 10

 9
 6
 3
 8
 5
 4
 3

 7
 1
 6
 10
 9
 2
 9

8

h

Adding 1 to a number is just like saying the number that comes next. **Materials:** One ten-sided die, and counters in two colors. **How to play:** On your turn, roll the die. If you roll a zero, it means zero. Add 1 to that number, say what you are doing as an addition problem, and cover the answer. **Example:** If you roll a 6, say "6 + 1 is 7" and cover a 7. **The first player to get four in a row wins.**

Count by twos on even numbers to 20

2, 4, 6, 8, 10, 12, 14, 16, 18, 20.

When you know the even numbers up to 20 in order, this knowledge can help you find answers to addition problems. When you were younger, you learned how to say "1, 2, 3, 4, 5, 6, 7, 8, 9, 10" by practicing until you could say it without thinking about it. Then, that knowledge helped you later. If you want to, you can do the same thing with the even numbers up to 20. What to do: With a partner, practice counting by twos on even numbers to 20. Here is how: You say "2, 4, 6, 8, 10, 12, 14, 16, 18, 20."

Add 2 to an even number

plus 2 is the next even number: . .

h 8 6 Adding 2 to an even number is just like saying the next number when you are counting by twos on the even numbers. The counting goes like this: 2, 4, 6, 8, 10. The next number after 8 is 10, and 8 + 2 is 10.

Materials: The 0, 2, 4, 6, 8, 10 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Your job is to find that number plus 2. The answer will be the next even number.

the next even number after eight is ten. That means 8 plus 2 is 10. So say "8 plus 2 is 10" and put a counter on a 10. The first player to get four in a row wins. Hint: If you don't know your even numbers yet, a different way to add two is counting 2 up.

Count by twos on odd numbers to 21

1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21.

When you know the odd numbers up to 21 in order, this knowledge can help you find answers to addition problems. When you were younger, you learned how to say "1, 2, 3, 4, 5, 6, 7, 8, 9, 10" by practicing until you could say it without thinking about it. Then, that knowledge helped you later. If you want to, you can do the same thing with the odd numbers up to 21. What to do: With a partner, practice counting by twos on odd numbers to 21. **Here is how:** You say "1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21."

Skill Builders: Count by twos from different numbers, odds (NP), Identify odds (NP)

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Add 2 to an odd number

_ plus 2 is the next odd number: ____.

Adding 2 to an odd number is just like saying the next number when you are counting by twos on the odd numbers. The counting goes like this: 1, 3, 5, 7, 11. The next number after 3 is 5, and 3 + 2 is 5. Materials: The 1, 3, 5, 7, 9 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Your job is to find that number plus two. The answer will be the next odd number. **Example:** If you draw a three, the next odd number after three is five. That means 3 plus 2 is 5. So say "3 plus 2 is 5" and put a counter on a 5. The first player to get four in a row wins. Hint: If you don't know your odd numbers yet, a different way to add two is counting 2 up.

Doubles are easy to remember

I know I+I, 2+2, 3+3, 4+4, and 5+5. And 6 + 6 is _____.

12	4	6	2	10
8	4	8	12	6
10	2	FREE SPACE	4	2
12	6	10	8	10
12	6	4	8	2

A lot of people feel that it is easy to remember 1+1, 2+2, 3+3, 4+4, and 5+5. This game helps you practice those, and also 6+6. Materials: The 1, 2, 3, 4, 5, 6 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Say the number you drew plus itself, and the sum. Cover the sum. If the answer is not available, it is the other player's turn. Example: If you draw a four, say "Four plus four is eight" and cover an 8. **Hint:** Here are the addition facts:

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$$1 + 1 = 2$$

$$2 + 2 = 4$$

$$3 + 3 = 6$$

$$4 + 4 = 8$$

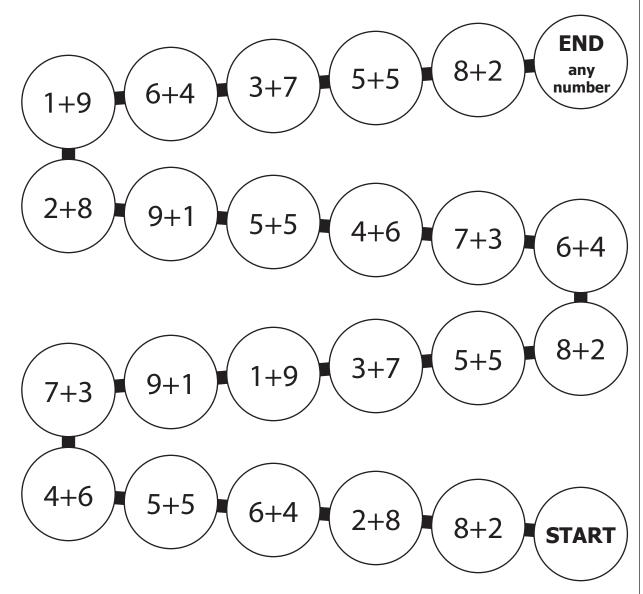
$$5 + 5 = 10$$

$$6 + 6 = 12$$

The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

1+2 = 2+1 (Commutative property of addition)

I am on _____ + ____. That is the same as _____ + ____.



Did you know that 1+2 is the same amount as 2+1? It's true. You can switch the order that way when you are adding any numbers, not just 1 and 2.

Materials: A ten-sided die, and two counters. How to play:
Both players put a counter on START. On your turn, roll the die. If you roll a zero, roll again. Move your counter to the next circle with an expression that starts with your number. Now, move your counter to the next circle that has the same numbers as the circle you are on, but in the opposite order.

Example: If you roll an 8, move to the next circle that says "8+2", and then jump to the next circle that says "2+8". You can land on the END circle by rolling a number that doesn't have any other circle to go to.

The first player to land on END wins.

A number plus 0 is the same number

I know + 0 is because .

START				END
-------	--	--	--	-----

Materials: A ten-sided die, a coin for flipping, and two counters. How to play: On your turn, roll the die. If you roll a zero, it means zero. Say the number you rolled plus zero, and the sum. Then flip the coin. If you get heads, move forward one space. If you get tails, move forward two spaces. Example: If you roll a three, say "3 plus 0 is 3" and then flip the coin to see how far to move. The first player to land on END wins.

Hint: Remember that any number plus zero is the same number. Note: This rule is so easy to use that it is a good idea to make sure learners understand why it is true. One way to do this is to ask them what 3 + 0 is, and when they say it is 3, ask them why. If they understand, they will say something like "Because you didn't add anything" or "Because zero is just nothing." If they seem confused, they may need to go back to the Skill Builders.

games (NP), Find the value of digits games (PV), Use addition to think about place value (PV) Skill Builders: Name -teens

CCSS.MATH.CONTENT.1.NBT.B.2.B

Add 10 to make a -teen

10 + _____ is ____.

12	18	11	10	13
19	14	16	15	17
13	14	FREE SPACE	12	11
15	19	17	18	16
16	10	14	17	15

The -teen numbers are 11, 12, 13, 14, 15, 16, 17, 18, and 19. In these numbers, the 1 means ten. So 13 is just 10 + 3, and 16 is just 10 + 6. You can use this any time you have to find 10 + a single digit number. Since you know that 16 means 10 + 6, that tells you 10 + 6 is 16. Materials: One 5-10 frame die, one ten-sided die, and counters in two colors. How to play: Place the 5-10 frame die with the ten side facing up. Leave that die that way. On your turn, roll the ten-sided die. If you roll a zero, it means zero. Move it next to the frame die that is showing ten. Then, say ten plus the number you rolled, and the sum. If the answer is not available, it is the other player's turn. Example: If you roll a 1, say "Ten plus one is eleven." Cover the sum. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Take away 1, frames, 1-5

____ – l is ____.

3	0	4	1	2
2	1	3	4	0
4	3	FREE SPACE	0	1
1	2	0	3	2
4	3	2	4	1

section because sometimes adding is easier when you also have beginning subtraction skills. Materials: One 0-5 frame die, and counters in two colors. How to play: On your turn, roll the die. If you roll a zero, roll again. Say the number you rolled minus one, and the answer. Cover the answer. If the answer is not available, it is the other player's turn. **Hint:** Remember that taking away one is just like saying the next number when you are counting backward. You count "10, 9, 8, 7, 6, 5, 4, 3, 2, 1." Right after 5, it is 4. That means 5 minus 1 is 4. So if you roll a five, say "5 minus 1 is 4" and put a counter on a 4. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

This game is in the Addition

Take away 1, frames, 5-10

____ – I is ____.

7	4	9	5	8
6	8	5	6	9
7	4	FREE SPACE	4	5
8	6	7	9	4
9	7	8	5	6

This game is in the Addition section because sometimes adding is easier when you also have beginning subtraction skills. Materials: One 5-10 frame die, and counters in two colors. How to play: On your turn, roll the die. Say the number you rolled minus one, and the answer. Cover the answer. If the answer is not available, it is the other player's turn. **Hint:** Remember that taking away one is just like saying the next number when you are counting backward. You count "10, 9, 8, 7, 6, 5, 4, 3, 2, 1." Right after 9, it is 8. That means 9 minus 1 is 8. So if you roll a 9, say "9 minus 1 is 8" and put a counter on an 8. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Take away 1, numerals

– l is .

Ó 0 8

This game is in the Addition section because sometimes adding is easier when you also have beginning subtraction skills. Materials: One ten-sided die, and counters in two colors. How to play: On your turn, roll the die. If you roll a zero, it means ten. Say the number you rolled minus one, and the answer. Cover a circle that shows the answer. Hint: Remember that taking away one is just like saying the next number when you are counting backward. You count "10, 9, 8, 7, 6, 5, 4, 3, 2, 1." Right after 5, it is 4. That means 5 minus 1 is 4. So if you roll a 5, say "5 minus 1 is 4" and put a counter on a 4. The first player to get four in a row wins.

Skill Builders: Many ways to show 4 and 5 (NP)

Numbers that add to 4 and 5, dot clusters

____ + ___ is 4 / ____ + ___ is !

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• • •	••••	• • •	• •
•••	• • • •	• •	• ••
		• • •	

either 4 or 5 dots. Materials: The 4, 5 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn. Example: If you draw a 5, you can say "2 plus 3 is 5" and cover a picture with two dots on one side and three dots on the other side. Or you can say "1 plus 4 is 5" and cover a picture with one dot on one side and four dots on the other side. The first player to get two rows of four in any direction wins. If the board fills and no one has two rows of four, the player with more counters wins.

In this game, every square has

Skill Builders: Many ways to show 5 and 6 (NP)

Numbers that add to 5 and 6, dot clusters

____ + ___ is 5 / ____ + ___ is 6

• • •	• •	• • • •	• • •
••••	• • •	• • •	• •
• • •	• • •	• •	• •
• • •	•••	• • •	• • • •

either 5 or 6 dots. **Materials:** The 5, 6 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn. Example: If you draw a 6, you can say "2 plus 4 is 6" and cover a picture with two dots on one side and four dots on the other side. Or you can say "3 plus 3 is 6" and cover a picture with three dots on each side. The first player to get two rows of four in any direction wins. If the board fills and no one has two rows of four, the player with more counters wins.

In this game, every square has

Skill Builders: Many ways to show 6 and 7 (NP)

Numbers that add to 6 and 7, dot clusters

_____ + ____ is 6 / _____ + ____ is 7

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• • •	• • •	• • • •	• • •
• • •	• • •	• •	• • • •
• • • •	• • •	• • • •	• • •

either 6 or 7 dots. **Materials:** The 6, 7 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn. Example: If you draw a 7, you can say "3 plus 4 is 7" and cover a picture with three dots on one side and four dots on the other side. Or you can say "2 plus 5 is 7" and cover a picture with two dots on one side and five dots on the other side. The first player to get two rows of four in any direction wins. If the board fills and no one has two rows of four, the player with more counters wins.

In this game, every square has

Skill Builders: Many ways to show 7 and 8 (NP)

Numbers that add to 7 and 8, dot clusters

_____ + ____ is 7 / _____ + ____ is 8

• • • • •	• • • •	• • •	• • •
• • •	• • •	• • •	• • • •
• • • •	• • •	• • • •	• • •
• • • •	• • •	• •	•

either 7 or 8 dots. **Materials:** The 7, 8 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn. Example: If you draw an 8, you can say "3 plus 5 is 8" and cover a picture with three dots on one side and five dots on the other side. Or you can say "2 plus 6 is 8" and cover a picture with two dots on one side and six dots on the other side. The first player to get two rows of four in any direction wins. If the board fills and no one has two rows of four, the player with more counters wins.

In this game, every square has

Skill Builders: Many ways to show 8 and 9 (NP)

Numbers that add to 8 and 9, dot clusters

_____ + ____ is 8 / ____ + ____ is 9

• • • • • • •	• • •	• • • •	• • • •
• • • • •	• • • • •	• • • • • • • • • • • • • • • • • • • •	•••
••••	• • • •	• •	•••
•	•	• • • • •	• • •

either 8 or 9 dots. **Materials:** The 8, 9 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn. Example: If you draw a 9, you can say "4 plus 5 is 9" and cover a picture with four dots on one side and five dots on the other side. Or you can say "3 plus 6 is 9" and cover a picture with three dots on one side and six dots on the other side. The first player to get two rows of four in any direction wins. If the board fills and no one has two rows of four, the player with more counters wins.

In this game, every square has

Skill Builders: Many ways to show 9 and 10 (NP)

Numbers that add to 9 and 10, dot clusters

____ + ___ is 9 / ____ + ___ is 10

• • • •	• • • • •	• • •	• • • •
• • • • •	• • • •	• • • • •	• • •
• • • • •	• • •	• • • •	• • • • • • • • • • • • • • • • • • • •
• • •	• • • •	• • • •	• • • • • • • • • • • • • • • • • • • •

either 9 or 10 dots. **Materials:** The 9, 10 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn. Example: If you draw a 10, you can say "4 plus 6 is 10" and cover a picture with four dots on one side and six dots on the other side. Or you can say "3 plus 7 is 10" and cover a picture with three dots on one side and seven dots on the other side. The first player to get two rows of four in any direction wins. If the board fills and no one has two rows of four, the player with more counters wins.

In this game, every square has

Numbers that add to 10 and 11, dot clusters

_____ + ____ is 10 / ____ + ___ is 11

• • • • • • • • • • • • • • • • • • • •	• • • • •	• • • • •	• • • •
	• • •	• • • •	
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In this game, every square has either 10 or 11 dots. **Materials:** The 10, 11 cards from a deck of double ten-frame cards, and counters in two colors. **How to play:** On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn.

can say "4 plus 7 is 11" and cover a picture with four dots on one side and seven dots on the other side. Or you can say "5 plus 6 is 11" and cover a picture with five dots on one side and six dots on the other side. The first player to get two rows of four in any direction wins. If the board fills and no one has

two rows of four, the player with

more counters wins.

Numbers that add to 11 and 12, dot clusters

_____ + ____ is II / ____ + ___ is I2

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In this game, every square has either 11 or 12 dots. **Materials:** The 11, 12 cards from a deck of double ten-frame cards, and counters in two colors. **How to play:** On your turn, draw a card and place it face up so both players can see it. Find a picture showing that number of dots, say the addition fact the picture shows, and put a counter on it. If the answer is not available, it is the other player's turn.

Example: If you draw a 12, you can say "5 plus 7 is 12" and cover a picture with five dots on one side and seven dots on the other side. Or you can say "4 plus 8 is 12" and cover a picture with four dots on one side and eight dots on the other side.

The first player to get two rows of four in any direction wins. If the board fills and no one has two rows of four, the player with more counters wins.

Use odds and evens in addition

An _____ number plus an ____ number is an ____ number.

ODD player puts counters in these boxes

$$odd + even = ODD$$

even + odd = ODD

EVEN player puts counters in these boxes

$$even + even = EVEN$$

odd + odd = EVEN

boxes can help you error-check your answer to any addition problem. It's good to be in the habit of remembering these rules. Materials: Two ten-sided dice, and two counters. How to **play:** Decide which player gets odd numbers and which player gets even numbers. On your turn, roll the dice one at a time. If the first number is odd and the second number is even, the odd player puts a counter in the "odd + even = ODD" box. If the first number is even and the second number is odd, the odd player puts a counter in the "even + odd = ODD" box. If both numbers are even, the even player puts a counter in the "even + even = EVEN" box. If both numbers are odd, the even player puts a counter in the "odd + odd = EVEN" box. When there are 15 counters

The odd and even rules in the

When there are 15 counters on the board, the player with more wins.

Tens partners, introduction

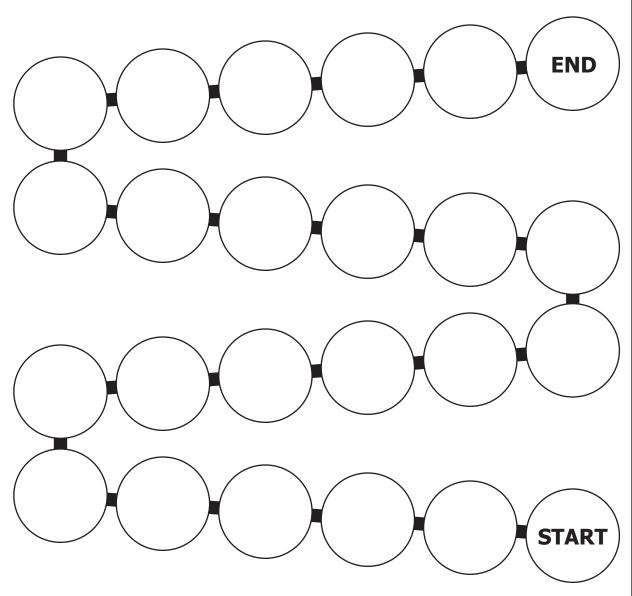
____ plus _____ is 10.

6 + 4 =10	0+10 =10	9+1 =10	7+3 =10	2+8 =10
8+2 =10	5+5 =10	4+6 =10	1+9 =10	3+7 =10
4+6 =10	3+7 =10	FREE SPACE	8+2 =10	9+1 =10
5+5 =10	2+8 =10	1+9 =10	0+10 =10	6+4 =10
7+3 =10	6+4 =10	8+2 =10	7+3 =10	9+1 =10

This game introduces the tens partners: Number pairs that add to 10. It is good to learn these, because 10 is an important number that can help you later. Materials: One ten-sided die, and counters in two colors. How to play: On your turn, roll the die. Say the number you rolled. From the board, choose one addition fact that has your number on it, and say the fact out loud. **Example:** If you roll a 3, say either "7 plus 3 is 10" or "3 plus 7 is 10". Cover the same addition fact that you chose. If the answer is not available, it is the other player's turn. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Tens partners of smaller numbers

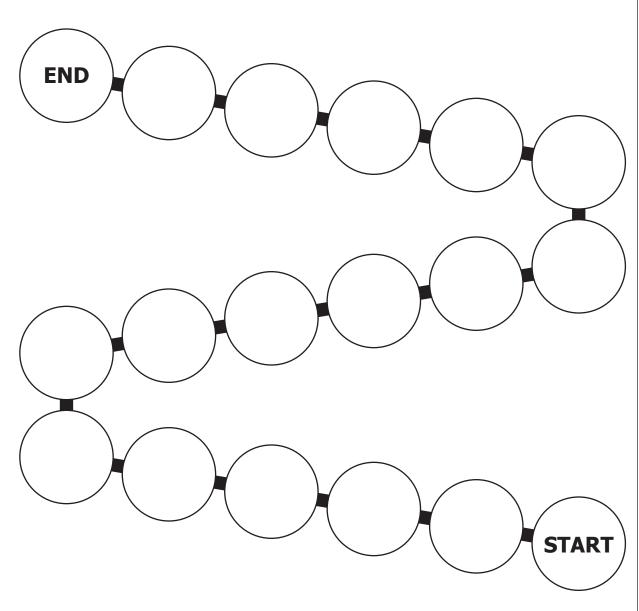
10 is _____ plus ____.



[Show a 0-5 frame die with a number 3 facing the players] This is a ten frame, so just by looking at it, you can see from the three dots and the seven empties that 3 + 7 is 10. In this game, you get to use this type of information to say numbers that add up to ten. Materials: One 0-5 frame die, and two counters. How to play: On your turn, roll the die. Say ten is the number you rolled, plus its tens partner, and move forward as many spaces as the tens partner. Example: If you roll a 2, say "10 is 2 plus 8" and move forward 8 spaces. The first player to land on END wins. Hint: In any ten frame, the number of dots, plus the number of empty squares, is always ten.

Tens partners of larger numbers

10 is _____ plus ____.



[Show a 5-10 frame die with a number 8 facing the players] Just like in the game before, you can use the information on the ten frames to say numbers that add up to ten. Here, the eight dots and the two empties tell you that 8 + 2 is 10. Materials: One 5-10 frame die, and two counters. **How to play:** On your turn, roll the die. Say ten is the number you rolled, plus its tens partner, and move forward as many spaces as the tens partner. Example: If you roll a 7, say "10 is 7 plus 3" and move forward 3 spaces. **The first** player to land on END wins. **Hint:** In any ten frame, the number of dots, plus the number of empty squares, is always ten.

Skill Builders: Previous tens partners games (A), Use odds and evens in addition (A)

Tens partners addition facts, numerals

10 is _____ plus ____.

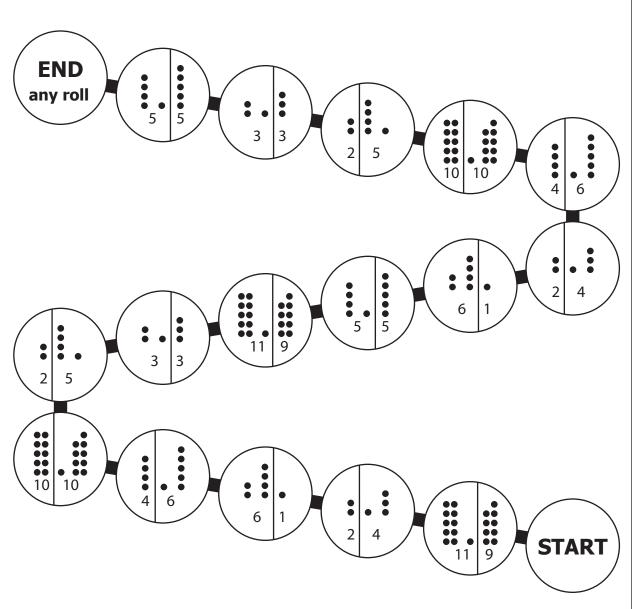
h **(**1 8

In this game, you get a number, and you find the number you would have to add to it to get 10. Materials: One ten-sided die and counters in two colors. How to play: On your turn, roll the ten-sided die. If you roll a zero, it means zero. Say ten is the number you rolled, plus its tens partner. Then, place a counter on the tens partner. **Example:** If you roll a 6, say "10 is 6 plus 4" and place your counter on a 4. The first player to get four in a row wins. Tip: Try not to use counting to find the answer. If you don't remember a number's tens partner right away, use odds and evens to help you recall it. 10 is even, so tens partners are both even or both odd. If you still need help, check the picture on a frame die or card. The number of dots and the number of empty squares are always tens partners, because together they fill the

ten frame.

10+1+9 is the same as 10+1+9 (Associative property of addition)

plus _____ is the same as ____ plus ____.

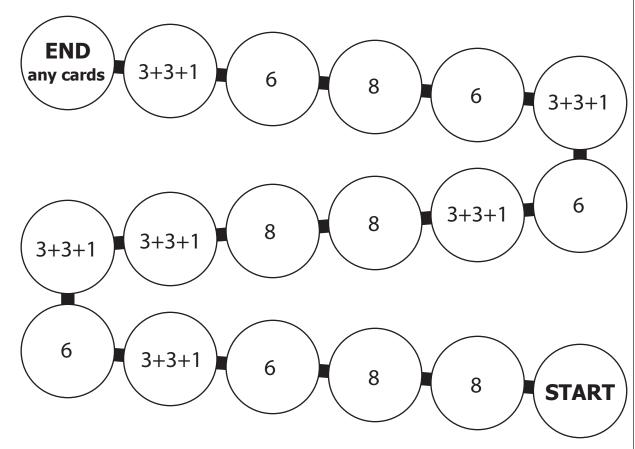


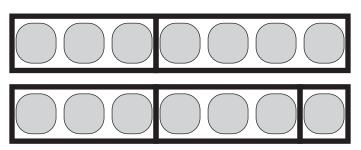
This game shows how you can use your tens partners knowledge to make adding easier. Materials: A 0-5 frame die, and two counters. How to play: On your turn, roll the die and move forward that number of spaces. If you roll a zero, roll again. Now, jump to the next circle where the dot pattern is the same as the dot pattern you are on, but the line dividing the dots is in a different place.

Example: If you are on a circle with the numbers 11 and 9, find the next circle that has the numbers 10 and 10. Did you know that 11+9 is the same amount as 10+10? It's true, and these pictures show why it is true: It is true because (10+1)+9 is the same as 10+(1+9). **The first player to land on END wins.**

Change 3+4 into 3+3+1

_____ + ____ is the same as ____ + ____ + ____





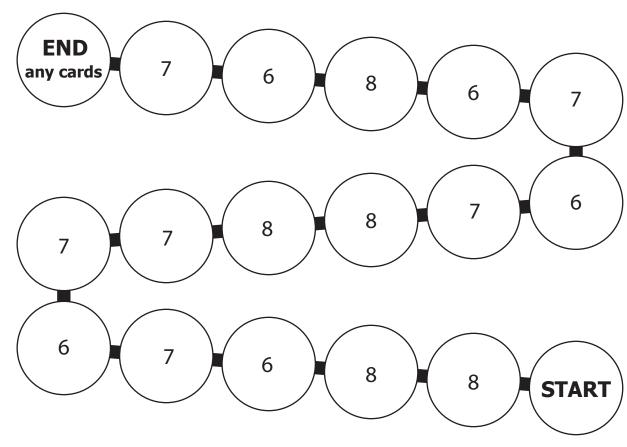
3+4 is 7. But if you ever have to find 3+4 and you don't remember the answer, you can change the 4 into 3+1. Your knowledge will help you solve 3+3+1, because you already know that 3+3=6, and you already know that 6+1=7. In this game, you get to practice changing 3+4 into 3+3+1.

Materials: The 3, 4 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. **Hint:** With 3+4, notice how the four dots are the same as three dots plus one more. Imagine that the three is going together with the other three. That leaves just one dot left over. That's one way to see why 3+4 is the same as 3+3+1. The first player to

land on END wins.

Add 3 and 4

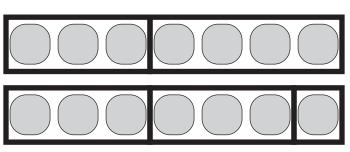
_____ + ____ is the same as _____ + ____ + ____



a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. Hint: With 3+4, notice how the four dots are the same as three dots plus one more. Imagine that the three is going together with the other three. You already know 3+3 is 6. That leaves just one dot left over, and you know that 6+1 is 7. That's one way to see why 3 plus 4 is 7. The first player to land on END wins.

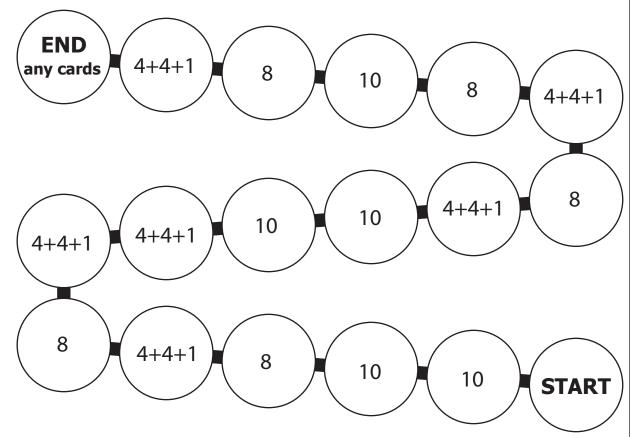
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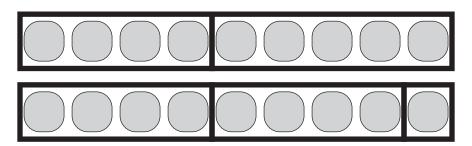
Materials: The 3, 4 cards from



Change 4+5 into 4+4+1

_____ + ____ is the same as ____ + ____ + ____





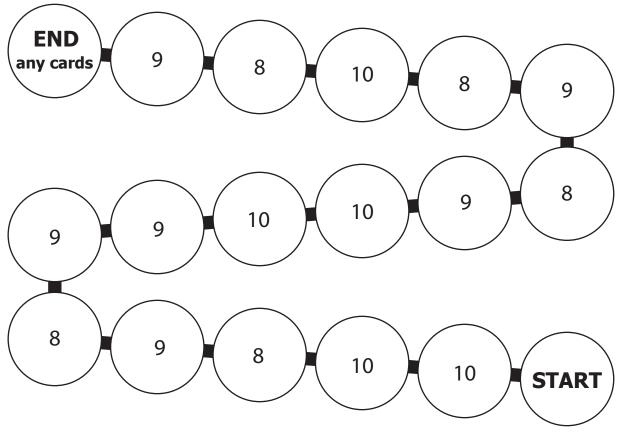
4+5 is 9. But if you ever have to find 4+5 and you don't remember the answer, you can change the 5 into 4+1. Your knowledge will help you solve 4+4+1, because you already know that 4+4=8, and you already know that 8+1=9. In this game, you get to practice changing 4+5 into 4+4+1.

Materials: The 4, 5 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. **Hint:** With 4+5, notice how the five dots are the same as four dots plus one more. Imagine that the four is going together with the other four. That leaves just one dot left over. That's one way to see why 4+5 is the same as 4+4+1. The first player to

land on END wins.

Add 4 and 5

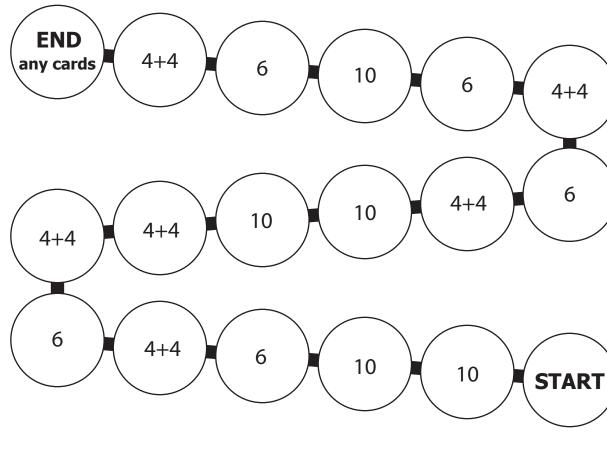
_____ + ____ is the same as _____ + ____ + ____

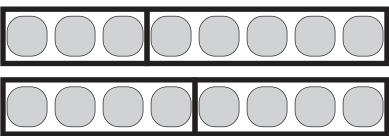


Materials: The 4, 5 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. Hint: With 4+5, notice how the five dots are the same as four dots plus one more. Imagine that the four is going together with the other tfour. You already know 4+4 is 8. That leaves just one dot left over, and you know that 8+1 is 9. That's one way to see why 4 plus 5 is 9. The first player to land on END wins.

Change 3+5 into 4+4

_____ + ____ is the same as ____ + ____





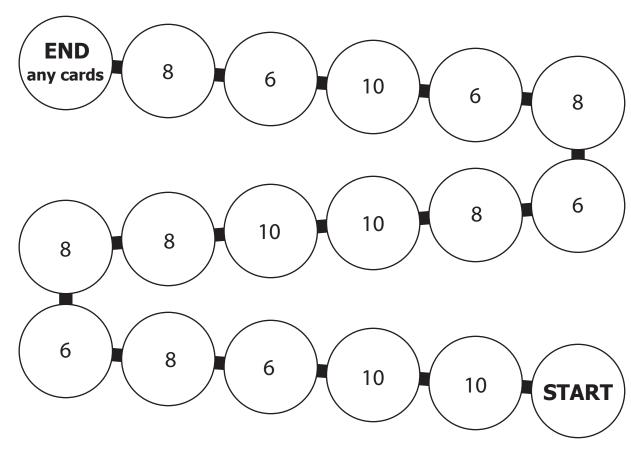
3+5 is 8. But if you ever have to find 3+5 and you don't remember the answer, you can change 3+5 into 4+4. Your knowledge will help you solve that, because you already know that 4+4=8. In this game, you get to practice changing 3+5 into 4+4. Materials: The 3, 5 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards.

Hint: With 3+5, imagine one of the dots from the five stack jumping over to the three stack. Then there would be two stacks of four. That's one way to see why 3+5 is the same as 4+4.

The first player to land on END wins.

Add 3 and 5

_____ + ____ is the same as ____ + ____

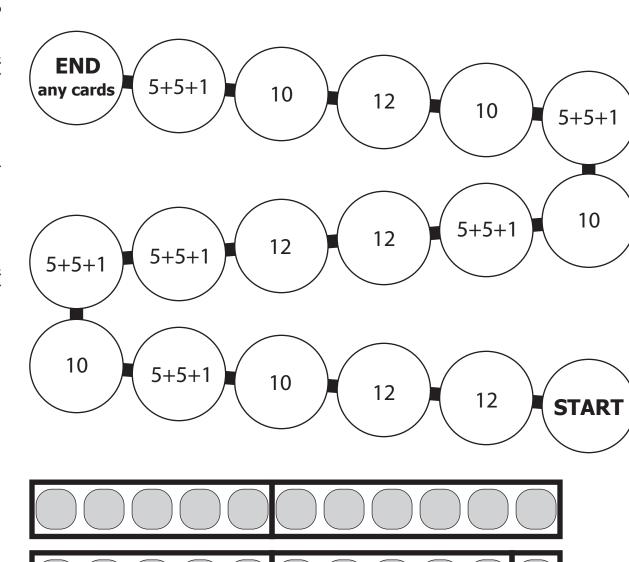


Materials: The 3, 5 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. Hint: With 3+5, imagine one of the dots from the five stack jumping over to the three stack. Then there would be two stacks of four, and you know that 4 plus 4 is 8. That's one way to see why 3 plus 5 is 8. The number lines show this, too. The first player to land on END wins.



Change 5+6 into 5+5+1

____ + ___ is the same as ____ + ___ + ___

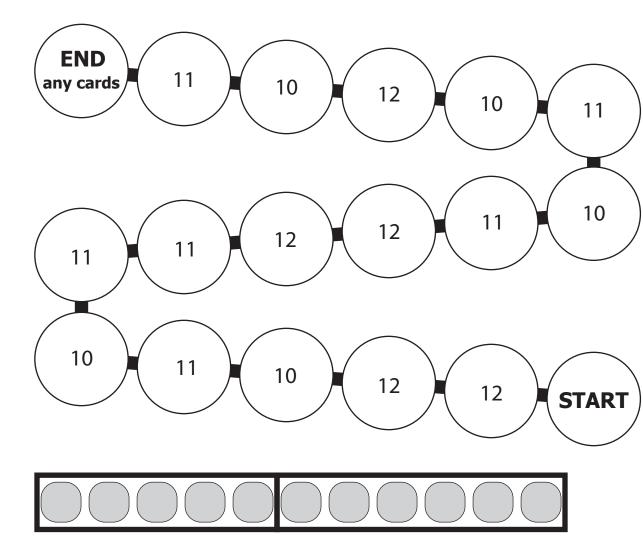


to find 5+6 and you don't remember the answer, you can change the 6 into 5+1. Your knowledge will help you solve 5+5+1, because you already know that 5+5=10, and you already know that 10+1=11. In this game, you get to practice changing 5+6 into 5+5+1. Materials: The 5, 6 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. **Hint:** With 5+6, notice how the six dots are the same as five dots plus one more. Imagine that the five is going together with the other five. That leaves just one dot left over. That's one way to see why 5+6 is the same as 5+5+1. The first player to land on END wins.

5+6 is 11. But if you ever have

Add 5 and 6

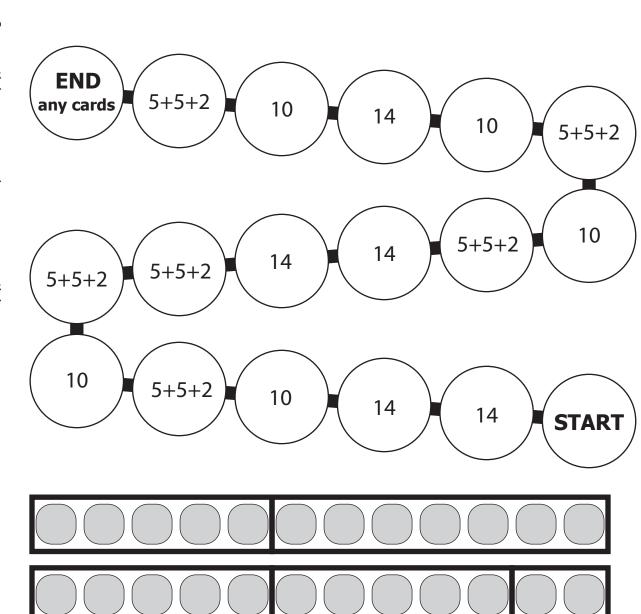
____ + ___ is the same as ____ + ___ + ___



Materials: The 5, 6 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. Hint: With 5+6, notice how the six dots are the same as five dots plus one more. Imagine that the five is going together with the other five. You already know 5+5 is 10. That leaves just one dot left over, and you know that 10+1 is 11. That's one way to see why 5 plus 6 is 11. The first player to land on END wins.

Change 5+7 into 5+5+2

_____ + ____ is the same as _____ + ____ + ____



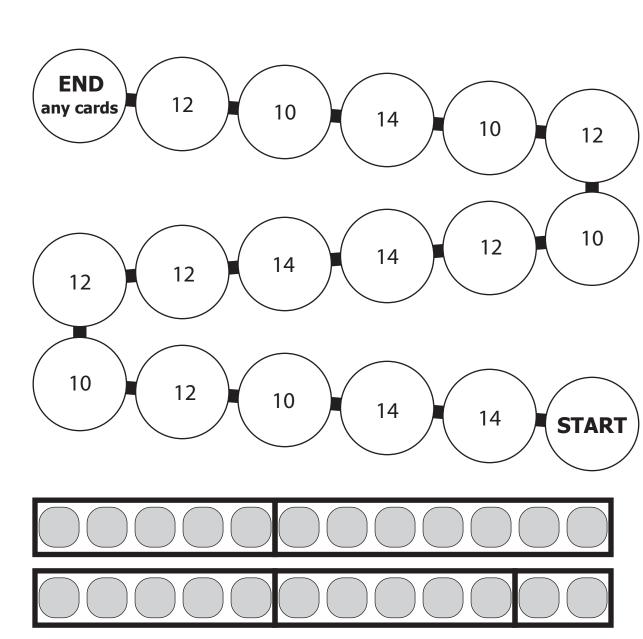
5+7 is 12. But if you ever have to find 5+7 and you don't remember the answer, you can change the 7 into 5+2. Your knowledge will help you solve 5+5+2, because you already know that 5+5=10, and you already know that 10+2=12. In this game, you get to practice changing 5+7 into 5+5+2. Materials: The 5, 7 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. **Notice:** If you didn't already know that 7 plus 7 is 14, try changing one of the 7s into 3+4. The 3 plus the other 7 is 10. That means that

7+7 is the same as 10+4, and you know that 10+4 is 14. **The first player to land on END**

wins.

Add 5 and 7

_____ + ____ is the same as _____ + ____ + ____

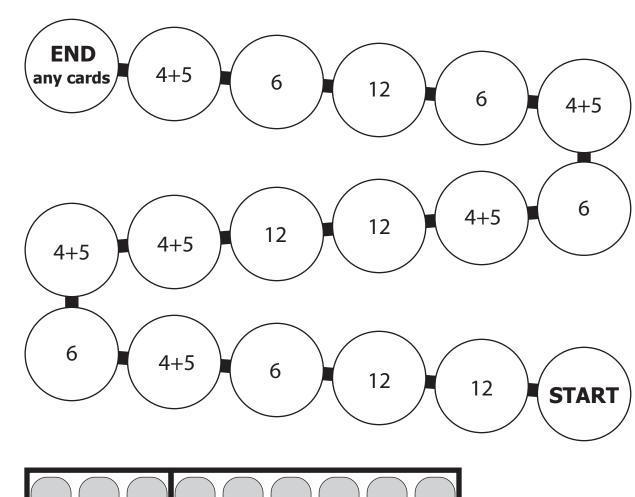


Materials: The 5, 7 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. Hint: With 5+7, notice how the seven dots are the same as five dots plus two more. Imagine that the five is going together with the other five. You already know 5+5 is 10. That leaves just two dots left over, and you know that 10+2 is 12. That's one way to see why 5 plus 7 is 12.

Notice: If you didn't already know that 7 plus 7 is 14, try changing one of the 7s into 3+4. The 3 plus the other 7 is 10. That means that 7+7 is the same as 10+4, and you know that 10+4 is 14. The first player to land on END wins.

Change 3+6 into 4+5

____ + ____ is the same as ____ + ____

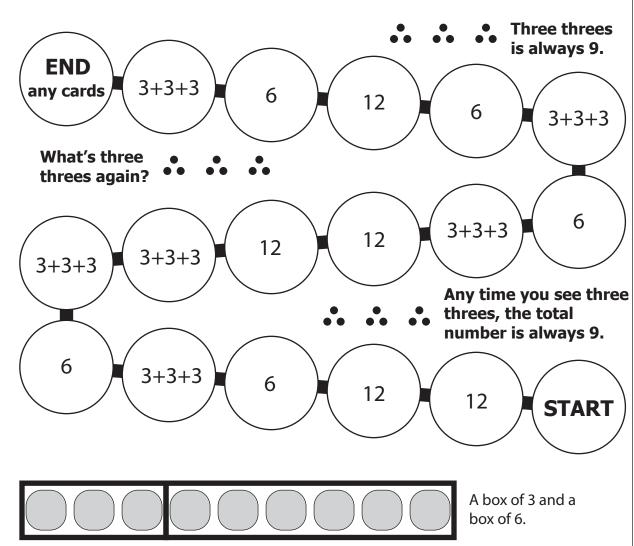


3+6 is 9. But if you ever have to find 3+6 and you don't remember the answer, you can change 3+6 into 4+5. Your knowledge will help you solve that, because you already know that 4+5=9. In this game, you get to practice changing 3+6 into 4+5. Materials: The 3, 6 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards.

Hint: With 3+6, notice how if you moved one dot from the 6 card to the 3 card, it would be a 4 and a 5. That means that 3+6 is the same as 4+5. And you already know that 4+5 is 9, so that means 3+6 is 9. The first player to land on END wins.

Change 3+6 into 3+3+3

_____ + ____ is the same as _____ + ____ + ____



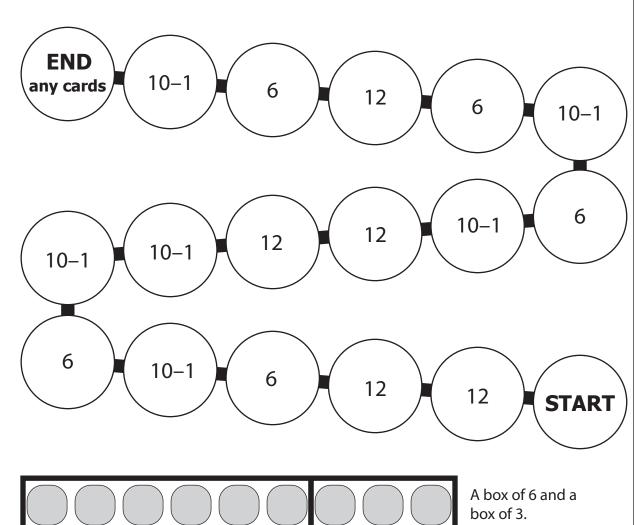
3 boxes of 3

is three threes.

3+6 is 9. But if you ever have to find 3+6 and you don't remember the answer, you can change 3+6 into 3+3+3. Your knowledge will help you solve that if you can also remember that three threes is always 9. In this game, you get to practice changing 3+6 into three threes. Materials: The 3, 6 cards from a deck of ten-frame cards, and two counters. **How to play:** Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards. Hint: With 3+6, notice that 6 is the same as 3+3. That means that 3+6 is the same as 3+3+3, which is three threes. Did you **know** that three threes is 9? It's true! Any time you see three threes, the total number is always nine. The first player to land on END wins.

Change 6+3 into 10-1

__ + ____ is the same as _____ - ____



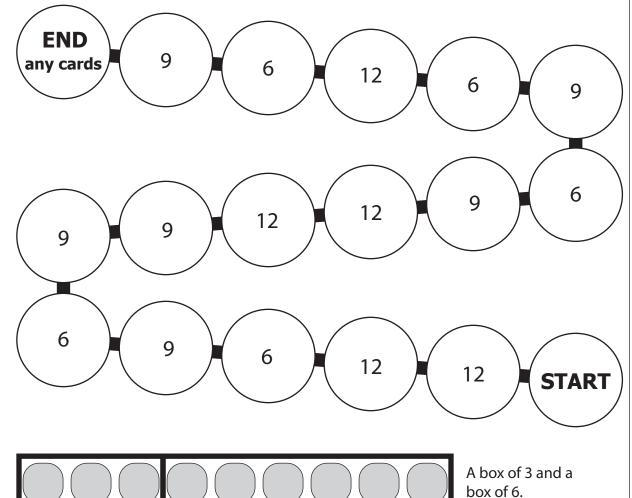
A box of 6 and a box of 4, take away 1.

This game is for learners who already know that 6+4 is 10, 4–1 is 3, and 10–1 is 9. If you ever have to find 6+3 and you don't remember the answer, you can change 6+3 into 10-1, which is 9. Materials: The 3, 6 cards from a deck of ten-frame cards, and two counters. How to play: Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them. Move to the next circle with an amount that is the same as the sum of the two cards.

The first player to land on END wins. Hint: With 6+3, notice how the dots on the 3 card would fit into the empty squares on the 6 card. If the dots were put into the empty squares, there would be just one empty square left. That makes sense, because you already know that 4–1 is 3 and 6+4 is 10, so that means 6+3 is 1 less than 10, which is 9.

Add 3 and 6

_____ + ____ is the same as _____ + / - ____



Choose your favorite way to find the answer without counting.

a deck of ten-frame cards, and two counters. **How to play:**Both players put a counter on START. On your turn, draw two cards and place them face up so both players can see them.

Move to the next circle with an amount that is the same as the sum of the two cards. **Hint:** If you can't remember what 3+6 is, change 3+6 into 4+5, or 10–1, or 3+3+3. **The first player to land on END wins.**

To add 9, make 10. What's left? Smaller addends

After I give one dot to the 9 to make 10, there are _____ dots left.

Materials: One 0-5 frame die, one 5-10 frame die, and counters in two colors. **How to** play: Place the 5-10 frame die with the nine side facing up. Leave that die that way. On your turn, roll the 0-5 frame die. If you roll a zero, roll again. Move the die you rolled so it is next to the nine die. To make 10, the nine die will need one more dot. So, mentally take one dot away from the number you rolled, and imagine the nine die is getting it. What does taking one dot away turn the number into? Cover a circle that has the answer. Example: If you roll a 2, when you take one away it turns into 1, so cover a 1. The first player to get four in a row wins.

Skill Builders: Take away 1 games (A)

To add 9, make 10. What's left? Larger addends

After I give one dot to the 9 to make 10, there are dots left.

8 Ó 6

Materials: Two 5-10 frame dice, and counters in two colors. How to play: Place one 5-10 frame die with the nine side facing up. Leave that die that way. On your turn, roll the other die. If you roll a zero, roll again. Move the die you rolled so it is next to the nine die. To make 10, the nine die will need one more dot. So, mentally take one dot away from the number you rolled, and imagine the nine die is getting it. What does taking one dot away turn the number into? Cover a circle that has the answer. Example: If you roll a 6, when you take one away it turns into 5, so cover a 5. The first player to get four in a row wins.

Skill Builders: To add 9, make 10. What's left? games (A)

Add 9 by making 10, smaller addends

9 + ____ is the same as 10 + ____.

Materials: One 0-5 frame die, one 5-10 frame die, and counters in two colors. **How to** play: Place the 5-10 frame die with the nine side facing up. Leave that die that way. On your turn, roll the 0-5 frame die. Move the die you rolled so it is next to the nine die. Your job is to add 9 to the number you rolled, and cover the answer. Here is a way to add 9: Take away one dot from the number you rolled to turn the 9 into a 10. **Example:** If you roll a 3, you need to find 9+3. First, make a group of ten: 9+1=10. You added a one, so take one away: 3-1=2. Say "9 plus 3 is the same as 10 + 2". Then add

the new numbers: 10+2=12, and cover a 12. **The first**

player to get four in a row

wins.

Skill Builders: To add 9, make 10. What's left? games (A)

Add 9 by making 10, larger addends

9 + ____ is the same as 10 + ____.

0 0 **Materials:** Two 5-10 frame dice and counters in two colors.

How to play: Place one 5-10 frame die with the nine side facing up. Leave that die that way. On your turn, roll the other 5-10 frame die. Move the die you rolled so it is next to the nine die. Your job is to add 9 to the number you rolled, and cover the answer. Here is a way to add 9: Take away one dot from the number you rolled to turn the 9 into a 10.

Example: If you roll an 8, you need to find 9+8. First, make a group of ten: 9+1=10. You added a one, so take one away: 8-1=7. Say "9 plus 8 is the same as 10 + 7". Then add the new numbers: 10+7=17, and cover a 17. **The first player to get four in a row wins.**

Take away 2, frames (Prepare to add 8)

____ – 2 is ____.

4	7	1	2	5
3	0	6	3	4
0	5	FREE SPACE	2	7
1	6	3	4	5
2	6	1	7	0

Materials: The 2, 3, 4, 5, 6, 7, 8, 9 cards from a deck of ten-frame cards, and counters in two colors. How to play: On your turn, draw a card and place it face up so both players can see it. Say the number you drew minus two, and the answer. Cover the answer. If the answer is not available, it is the other player's turn. Hint: Remember that taking away two is just like saying the second next number when you are counting backward. You count "10, 9, 8, 7, 6, 5, 4, 3, 2, 1." You say 6, and then two later you say 4. That means 6 minus 2 is 4. So if you draw a 6, say "6 minus two is 4" and put a counter on a 4. The first player to get five in

a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Take away 2, numerals (Prepare to add 8)

– 2 is .

h h 8

and counters in two colors. How to play: On your turn, roll the die. If you roll a zero, it means ten. If you roll a one, roll again. Say the number you rolled minus two, and the answer, and cover a circle that shows the answer. Hint: Remember that taking away two from a number is just like counting two backward from that number. Counting usually isn't the best arithmetic strategy, because it takes a long time, and it's easy to make a counting mistake. But when the number to count is only two, it works fine. The first player to get

four in a row wins.

Materials: One ten-sided die,

Skill Builders: Take away 2 games (A)

To add 8, make 10. What's left?

After I give two dots to the 8 to make I0, there are ____ dots left.

n

Materials: The 2, 3, 4, 5, 6, 7, 8, 9 cards from a deck of ten-frame cards, and counters in two colors. How to play: Place the 8 card face up and leave it that way. On your turn, draw a card and place it face up next to the eight card. To make a group of ten, the eight card will need two more dots. So, mentally take two dots away from the number you drew, and imagine the eight card is getting them. What does the number you drew turn into after you take two away? Cover the answer. **Example:** If you draw a five, when you take two away it turns into three, so cover a 3. The first player to get four in a row wins.

Add 8 by making 10

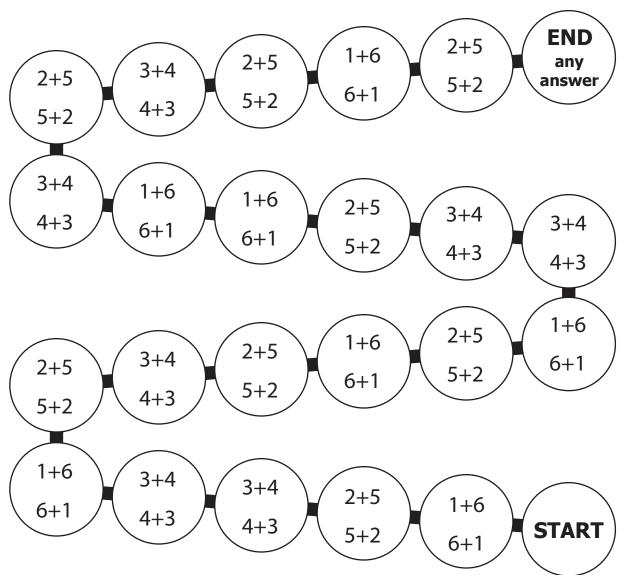
8 + is the same as 10 + .

6 3 6 3 6 6 3 3 6 16 Materials: The 2, 3, 4, 5, 6, 7, 8, 9 cards from a deck of ten-frame cards, and counters in two colors. How to play: Place the 8 card face up and leave it that way. On your turn, draw a card and place it face up next to the eight card. Your job is to add 8 to the number you drew, and cover the answer. Here is a way to add 8: Take away two dots from the number you drew to turn the 8 into a 10.

Example: If you draw a five, you need to find 8+5. First, make a group of ten: 8+2=10. You added a two, so take two away: 5-2=3. Then add your two answers: 10+3=13, and cover a 13. **The first player to get four in a row wins.**

Change 7 into something you can use

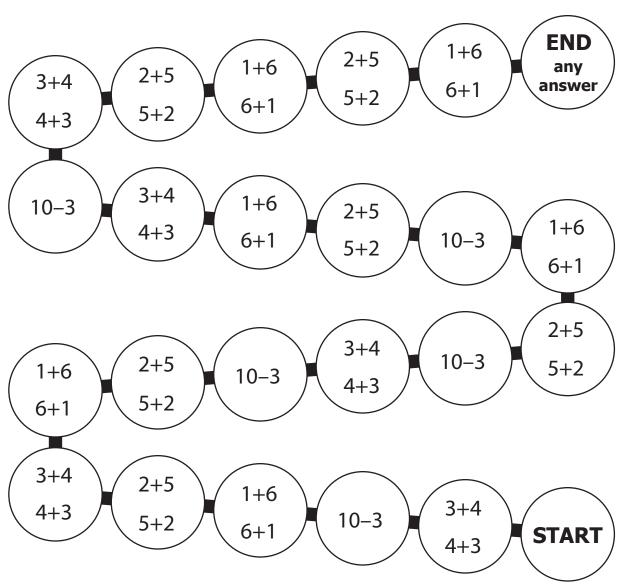
To find $_{---}$ + 7, I can change 7 into $_{---}$.



In this game, every circle shows a way of thinking about 7. When you have to add 7 to another number, sometimes thinking about 7 in a different way helps. Materials: The 4, 5, 6, 7, 8, 9 cards from a deck of ten-frame cards, an extra 7 card, and two counters. How to play: Place the 7 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. Which way of thinking about 7 gives you a way to add 7 to your number? Move your counter to the next circle that shows a way to add 7 to your number. **Example:** If you draw a five, that means you're adding 5+7. With 5+7, it's useful to change the 7 into 5+2. That's because you know 5+5 is 10, so that means the answer you are looking for is 2 more than 10, and you know that's 12. So move your counter to the next 5+2 circle. The first player to land on END wins.

Change 7 into something you can use, includes 10 - 3

To find _____ + 7, I can change 7 into ____.



In this game, every circle shows a way of thinking about 7. If you are not already comfortable subtracting 3, use the game before this one. **Materials:** The 4, 5, 6, 7, 8, 9 cards from a deck of ten-frame cards, an extra 7 card, and two counters. How to play: Place the 7 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. Which way of thinking about 7 gives you a way to add 7 to your number? Move your counter to the next circle that shows a way to add 7 to your number. **Example:** If you draw a four, that means you're adding 4+7. With 4+7, it's useful to change the 7 into 6+1. That's because you know 4+6 is 10, so that means the answer you are looking for is 1 more than 10, and you know that's 11. So move your counter to the next 6+1 circle. The first player to land on END wins.

Skill Builders: Change 7 into something you can use (A)

Add 7 by changing it into something you can use

To find 7 + _____, I can change 7 into _____.

0 3 6 3 6 3 6 3 3 6

Materials: The 3, 4, 5, 6, 7, 8, 9 cards from a deck of ten-frame cards, an extra 7 card, and counters in two colors. How to play: Place the 7 card face up and leave it that way. On your turn, draw a card and place it face up next to the 7 card. Your job is to add 7 to the number you drew, and cover the answer. Here is a way to add 7: Change the 7 into something simpler. **Example:** If you draw a five, you need to find 7+5. One way is to say "7+5 is the same as 2+5+5, which is the same as 2+10, which is 12" and cover a 12. The first player to get four in a row wins.

Skill Builders: Previous addition games

Add 6 by choosing the best strategy

To find 6 + _____, I can change the number _____ into ____.

0 8 8 3 3 8 8 6 9 6

a deck of ten-frame cards, an extra 6 card, and counters in two colors. How to play: Place the 6 card face up and leave it that way. On your turn, draw a card and place it face up next to the 6 card. Your job is to add 6 to the number you drew, and cover the answer. If you don't already know the answer, choose a strategy to add 6 to the number you drew. The best strategy will depend on what you draw. Example 1: If you draw a nine, you need to find 6+9. One way is to make the nine into a group of ten: 6+9 =5+10 = 15. **Example 2:** If you draw a seven, you need to find 6+7. One way is to change the seven into 4+3. Then 6+7 =6+4+3 = 10+3 = 13. The first player to get four in a row wins.

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Materials: The 0-9 cards from

Check how well you have learned the addition facts

I know this right now. / I could find the answer.

	8	1	5	9	3	2	7	4	10	6
1	1+8	1 + 1	1 + 5	1+9	1+3	1+2	1 + 7	1 + 4	1 + 10	1+6
10	10 + 8	10 + 1	10 + 5	10 + 9	10 + 3	10 + 2	10 + 7	10 + 4	10 + 10	10 + 6
4	4+8	4+1	4+5	4+9	4+3	4+2	4+7	4+4	4+10	4+6
7	7 + 8	7 + 1	7 + 5	7+9	7+3	7+2	7+7	7 + 4	7 + 10	7+6
3	3+8	3+1	3+5	3+9	3+3	3+2	3+7	3 + 4	3 + 10	3+6
9	9+8	9+1	9+5	9+9	9+3	9+2	9+7	9+4	9 + 10	9+6
6	6+8	6+1	6+5	6+9	6+3	6+2	6+7	6+4	6+10	6+6
2	2+8	2+1	2+5	2+9	2+3	2+2	2+7	2+4	2 + 10	2+6
8	8+8	8 + 1	8 + 5	8+9	8+3	8+2	8+7	8+4	8 + 10	8+6
5	5+8	5 + 1	5 + 5	5+9	5+3	5+2	5+7	5 + 4	5 + 10	5+6

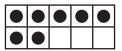
If you have played the games up to this point, you have probably solved every one of the single-digit addition facts! Now is a good time to check and see how well you know them. **Materials:** A pencil. Note: An expression is a part of a number sentence, like "3 + 5" or "8". What to do: For each square, ask yourself what the expression in the square equals. If you know the answer pretty soon, write a Y (for Yes) or a check mark. If it would take you a while to figure out the answer, write an N (for No) or leave the square blank. **Example:** If the

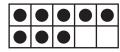
Variation: A helper can say the expressions and make the check marks.

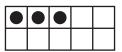
expression is 3 + 5, that equals 8. If you knew 3 + 5 = 8 pretty soon, write a Y or a check mark.

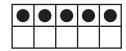
If you didn't, write an N or leave the square blank.

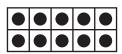
I plus _____ is ____.

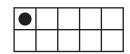




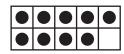


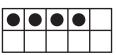


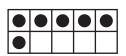










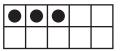


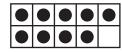
Materials: The 2-11 cards from a deck of double ten frame cards, a 1 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 1 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 1 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 5, the question is "1 plus what number equals 5?" **Hint:** You can figure this out by imagining the 1 card is transparent except for the dot. If you covered the 5 card with the transparent 1 card, how many more dots would you need

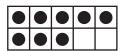
on the 1 card to cover 5 dots? When you think about it this way, you can see the answer is

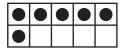
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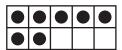
2 plus _____ is ____.

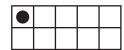


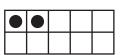


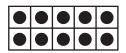


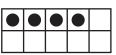


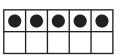








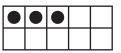


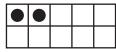


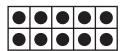
a deck of double ten frame cards, a 2 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 2 card face up and leave it ReckonMath.com Board Games for Early Mathematics © 2020 by Kathleen Hansen This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/ or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA. that way. On your turn, draw a card and place it face up so both players can see it. The question is, 2 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 6, the question is "2 plus what number equals 6?" **Hint:** You can figure this out by imagining the 2 card is transparent except for the dots. If you covered the 6 card with the transparent 2 card, how many more dots would you need on the 2 card to cover 6 dots? When you think about it this way, you can see the answer is 4.

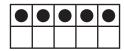
Materials: The 3-12 cards from

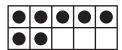
3 plus _____ is ____.

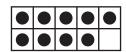


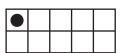


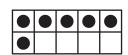


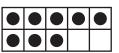


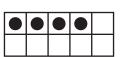










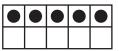


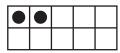
a deck of double ten frame cards, a 3 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 3 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 3 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 7, the question is "3 plus what number equals 7?" **Hint:** You can figure this out by imagining the 3 card is transparent except for the dots. If you covered the 7 card with the transparent 3 card, how many more dots would you need on the 3 card to cover 7 dots? When you think about it this way, you can see the answer is

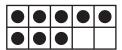
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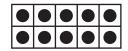
Materials: The 4-13 cards from

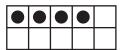
4 plus _____ is ____.

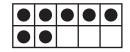


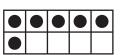


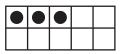


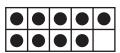


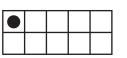








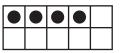


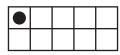


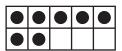
a deck of double ten frame cards, a 4 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 4 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 4 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 9, the question is "4 plus what number equals 9?" **Hint:** You can figure this out by imagining the 4 card is transparent except for the dots. If you covered the 9 card with the transparent 4 card, how many more dots would you need on the 4 card to cover 9 dots? When you think about it this way, you can see the answer is 5.

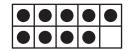
Materials: The 5-14 cards from

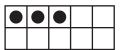
5 plus _____ is _____.

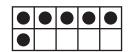


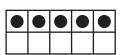


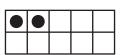


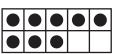


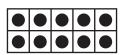










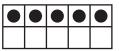


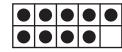
a deck of double ten frame cards, a 5 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 5 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 5 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 9, the question is "5 plus what number equals 9?" Hint: You can figure this out by imagining the 5 card is transparent except for the dots. If you covered the 9 card with the transparent 5 card, how many more dots would you need on the 5 card to cover 9 dots? When you think about it this way, you can see the answer is

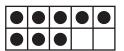
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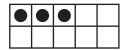
Materials: The 6-15 cards from

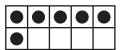
6 plus _____ is _____.

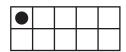


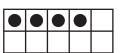


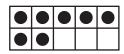


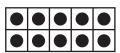


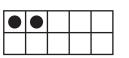








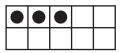


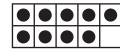


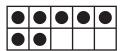
Materials: The 7-16 cards from a deck of double ten frame cards, a 6 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 6 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 6 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 10, the question is "6 plus what number equals

If you draw a 10, the question is "6 plus what number equals 10?" **Hint:** You can figure this out by imagining the 6 card is transparent except for the dots. If you covered the 10 card with the transparent 6 card, how many more dots would you need on the 6 card to cover 10 dots? When you think about it this way, you can see the answer is 4.

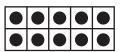
7 plus _____ is ____.

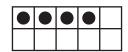


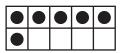


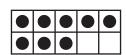




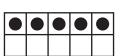








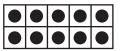


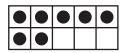


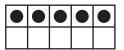
Materials: The 8-17 cards from a deck of double ten frame cards, a 7 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 7 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 7 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw an 11, the question is "7 plus what number equals

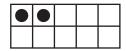
is "7 plus what number equals 11?" **Hint:** You can figure this out by imagining the 7 card is transparent except for the dots. If you covered the 11 card with the transparent 7 card, how many more dots would you need on the 7 card to cover 11 dots? When you think about it this way, you can see the answer is 4.

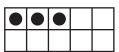
8 plus _____ is ____.

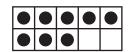


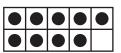


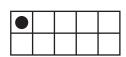


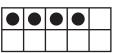


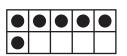








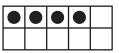


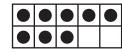


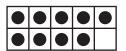
Materials: The 9-18 cards from a deck of double ten frame cards, an 8 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 8 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 8 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 12, the question is

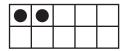
If you draw a 12, the question is "8 plus what number equals 12?" **Hint:** You can figure this out by imagining the 8 card is transparent except for the dots. If you covered the 12 card with the transparent 8 card, how many more dots would you need on the 8 card to cover 12 dots? When you think about it this way, you can see the answer is 4.

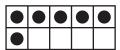
9 plus _____ is ____.

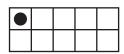


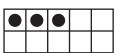


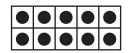


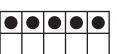


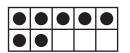












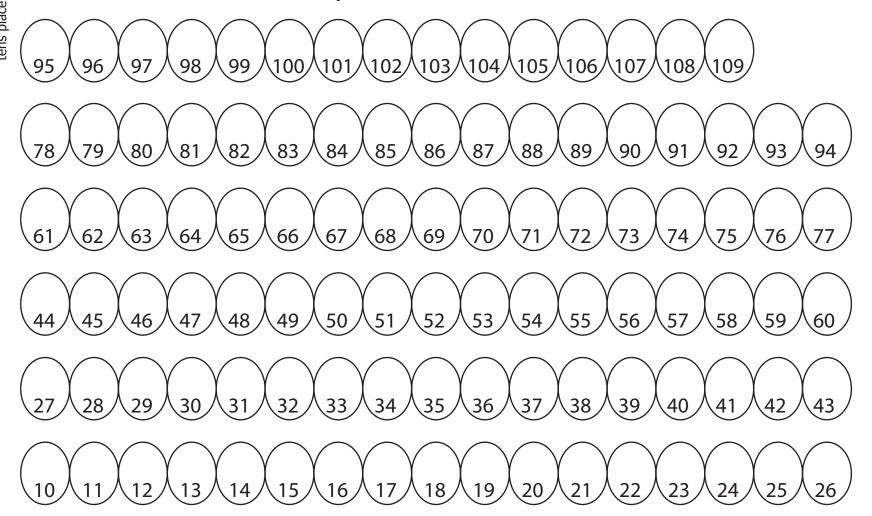
from a deck of double ten frame cards, a 9 card from a deck of ten frame cards, and counters in two colors. How to play: Place the 9 card face up and leave it that way. On your turn, draw a card and place it face up so both players can see it. The question is, 9 plus what number equals the number you drew? Cover the answer. If the other player's counter is already there, you can bump it off. When all the ten frames are covered, whoever has more counters on the board wins. Example: If you draw a 13, the question is "9 plus what number equals 13?" Hint: You can figure this out by imagining the 9 card is transparent except for the dots. If you covered the 13 card with the transparent 9 card, how many more dots would you need on the 9 card to cover 13 dots? When you think about it this way, you can see the answer is

4.

Materials: The 10-19 cards

Add 10 to any 2-digit number

I made the number _____. I0 + my number is _____.



Materials: Two ten-sided dice, and counters in two colors. **How to play:** On your turn, roll the dice. If you roll a zero, it means zero. Arrange the dice to make a 2-digit number. Now, add 10 to that number and cover the answer. If the other player's counter is already there, you can bump it off. **Example:** If you roll a 2 and a 5, you could make the number 25, add 10, and cover 35. Or you could make the number 52, add 10, and cover 62. **When there are 20 counters on the board, the player with more wins.** Hint: The numbers 01, 02, 03, 04, 05, 06, 07, 08, 09 are the same as the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9.

Skill Builders: Previous addition games

Add two 1-digit numbers

____ + ____ is ____.

 Materials: Two ten-sided dice, and counters in two colors. **How to play:** On your turn, roll the dice. If you roll a zero, roll again. Add the numbers you rolled, say the addition problem, and cover the answer. If the answer is not available, roll again. **Example:** If you roll a six and a three, say "6+3 = 9" and cover a nine. **The first player to get four in a row**

wins.

Add a 1-digit number to a number from 10 to 15

_____ + _____ is _____.

15	11	18	17	12
19	22	20	24	16
25	23	FREE SPACE	14	21
13	12	24	19	13
11	16	18	23	21

Materials: A 10-15 frame die, a ten-sided die, and counters in two colors. How to play: On your turn, roll both dice. If you roll a zero, it means ten. Add the numbers on the dice and say the addition problem and the answer. If the answer is not available, it is the other player's turn. **Example:** If you roll a 15 and an 8, say "15 plus 8 is 23" and cover a 23 square. Hint: If you are not sure what 15+8 is right away, you can change 15+8 into (10+5)+8, which is the same as 10+(5+8), which is 10+13. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Add a 1-digit number to a number from 15 to 20

_____ + ____ is ____.

16	18	26	29	20
21	30	25	22	19
28	17	FREE SPACE	24	27
23	21	18	17	26
27	23	22	20	24

Materials: A 15-20 frame die, a ten-sided die, and counters in two colors. How to play: On your turn, roll both dice. If you roll a zero, it means ten. Add the numbers on the dice and say the addition problem and the answer. If the answer is not available, it is the other player's turn. **Example:** If you roll a 18 and a 5, say "18 plus 5 is 23" and cover a 23 square. Hint: If you are not sure what 18+5 is right away, you can change 18+5 into (10+8)+5, which is the same as 10+(8+5), which is 10+13. The first player to get five in a row wins. If the board fills and no one has five in a row, the player with more counters wins.

Add multiples of 10

____ + ____ is ____.

180 130 50 00 160 50 150 180 90 60 40 30 160 90 100 60 150 80 30 180 160 150 20 80 70 140

If 5 + 3 = 8, then 50 + 30 =80. If 4 + 7 = 11, then 40 + 70= 110. In this game, you practice addition problems like 50 + 30 = 80 and 40 + 70 =110. Materials: Four ten-sided dice, and counters in two colors. How to play: Place two of the dice so that the zero side is facing up. Leave them that way. On your turn, roll the other two dice. If you roll a zero, roll again. Move each die you rolled next to one of the zero dice, to make two 2-digit numbers that both end in zero. Add them, say the addition problem, and cover the answer. If the answer is not available, roll again. Example: If you roll a six and a three, make a 60 and a 30, say "60 + 30 = 90'' and cover a 90. **The** first player to get four in a row wins.

Add multiples of 100

____ + ____ is ____.

800 1300 400 700 1000 1700 1600 500 500 800 900 400 300 400 600 600 1000 500 800 300 1800 1600 700 800 1100 1500 400

If 5 + 3 = 8, then 500 + 300 =800. If 4 + 7 = 11, then 400 +700 = 1100. In this game, you practice addition problems like 500 + 300 = 800 and 400 + 700= 1100. Materials: Six ten-sided dice, and counters in two colors. How to play: Place four of the dice so that the zero side is facing up. Leave them that way. On your turn, roll the other two dice. If you roll a zero, roll again. Move each die you rolled next to a pair of zero dice, to make two 3-digit numbers that both end in two zeros. Add them, say the addition problem, and cover the answer. If the answer is not available, roll again. Example: If you roll a six and a three, make a 600 and a 300, say "600 + 300 = 900" and cover a 900.

The first player to get four in a row wins.