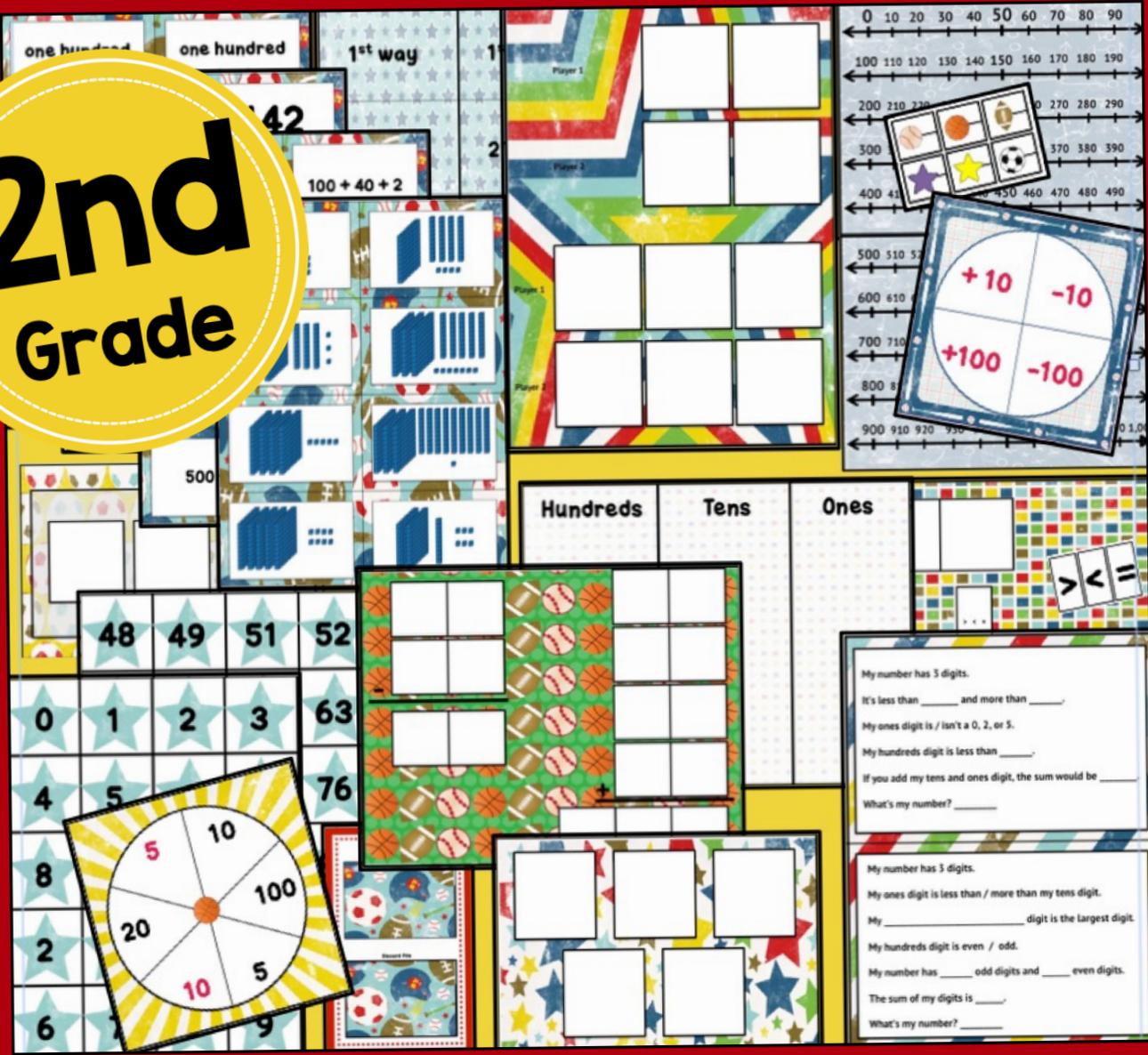


2nd Grade

Grade

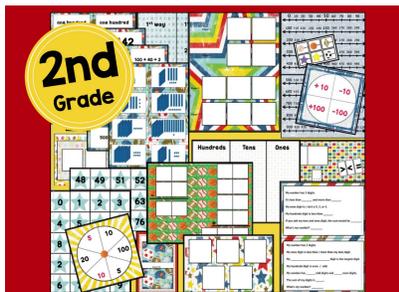


NUMBER & OPERATIONS IN BASE TEN

14 place value partner games

by Angela Watson

Check out the complete product line for 2nd grade math!



2nd Grade

NUMBER & OPERATIONS IN BASE TEN
14 place value partner games

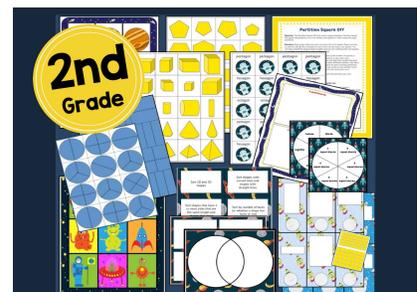
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2nd Grade

OPERATIONS & ALGEBRAIC THINKING
11 math partner games

by Angela Watson



2nd Grade

GEOMETRY
8 math partner games

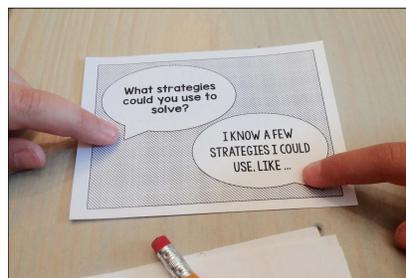
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Editable fact practice games
for school or home



ADDITION K.I.T.S.

by Angela Watson



**MATH PARTNER
DISCUSSION CARDS**

by Angela Watson



QUESTION STEMS
for math practices

by Angela Watson

Build It, Add It, Subtract It

Materials: Base Ten Blocks sorting mat, Build It Add It Subtract It spinner, base ten block manipulatives

Directions: You and your partner each choose a number between 100 and 900 and represent that number using base ten blocks. Take turns looking at each other's base ten blocks and guessing your partner's number. Award one point for each correct guess. Then take turns spinning the spinner and using mental math to figure out the new number. For example, if your partner built 250 and you spun -10, you would say, "250-10=240." You can use the base ten blocks to check your work if needed. Award each player a point for correctly figuring out the new number. Keep playing until time is up. The player with the most points wins the game!

Challenge: Can you compare your number to your partner's number? Write a number sentence using greater than and less than signs to show which amount is bigger.



Math Talk:

What does zero represent in a number?
How can changing one digit affect the value of a number?
What strategies did you use when comparing numbers?
What patterns did you notice when adding/subtracting 10? 100?

CCSS: Use place value understanding and properties of operations to add and subtract.

2.NBT.B.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

I can choose an appropriate strategy for solving an addition or subtraction problem within 1000.

I can explain how the strategy was used to write the equation.

I can compose hundreds and tens when necessary to add within 1000 (e.g. regrouping, carrying.)

I can decompose hundreds and tens when necessary to subtract within 1000 (e.g. regrouping, borrowing.)

2.NBT.B.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

I can apply knowledge of place value to mentally add 10 to a given number 100-900.

I can apply knowledge of place value to mentally add 100 to a given number 100-900.

I can apply knowledge of place value to mentally subtract 10 from a given number 100-900.

I can apply knowledge of place value to mentally subtract 100 from a given number 100-900.

Game Direction Pages

Guess My Card

Materials: One Place Value Sorting Mat, place value cards (numbers and the words), and you could use number words, expanded form, or base ten block manipulatives, pencil and paper to keep score.

Directions: You and your partner each take three place value cards and a number mat. You each choose one of the cards to represent with a number word. You take turns writing the number on your partner's mat. You can use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number.

Math Talk: Which strategy works better for you, drawing or using blocks? Why? How are some of the ways you could be using the cards? How did you choose from many of the cards to use in your model? What would happen if you switched two of the digits? How did you model numbers with a zero in them?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Mystery Number

Materials: Mystery Number cards in plastic page protectors, Visual Math markers, paper towels, blank paper or math manipulatives.

Directions: You and your partner each take one Mystery Number card and each secretly choose a number to use each the card. Write the number down on your partner's card. You can use the card to help you write the number. You can also use the card to help you write the number. You can also use the card to help you write the number.

Math Talk: What strategies did you use to try to guess your partner's number? How did you know when you were close? What clues were the most helpful? What clues were the least helpful? What clues were the most helpful? What clues were the least helpful?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Place Value Go Fish

Materials: Place value cards (numbers) and expanded form cards, you use for the challenge!

Directions: Mix up all the cards. Place them in one face down stack and deal 1 to each player. Take turns asking each other questions to try to find a match. Start by asking "How many tens do you have?" or "How many ones do you have?" You can also ask "How many tens do you have?" or "How many ones do you have?"

Math Talk: How can you tell the value of each digit in a number? How would changing the position of one digit affect the number? What are some different ways you could use your partner for a match? What strategies did you use to look for matches for your partner? How might the game change if you used different cards?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Number Line Race

Materials: Number Line Race game boards (two pages), game pieces, number line markers.

Directions: You and your partner each choose a game piece and place them on the start of the first number line game board. Take turns spinning the spinner and moving along the number line. Use your counting strategies to help you move more quickly. You can also use the number line to help you move more quickly. You can also use the number line to help you move more quickly.

Math Talk: What patterns did you notice on the number lines? How could you tell where your game piece belonged on the line? How did you know when to stop? How did you know when to stop? How did you know when to stop?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Count On

Materials: Two Digit Addition Sorting Mat, place value cards (numbers and the words), and you could use number words, expanded form, or base ten block manipulatives, pencil and paper to keep score.

Directions: This is a game that you and your partner will work together to win. Roll two dice and make the greatest two-digit number you can from them. For example, if you roll a 2 and a 5, you would make 52. You can also use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number.

Math Talk: How could you tell which value to place the first ten numbers you rolled to make the greatest number? What strategies did you use for quickly adding during the game? What questions did you ask your partner?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Numbers 4 Ways

Materials: Numbers Four Ways game board for each player, place value cards (numbers), base ten block models, expanded form, and word forms.

Directions: Shuffle all the cards in one stack and keep them face down. You and your partner each take a game board and two cards. Place the cards on the top spots of your board and read "100." Write the two numbers you will try to show on the other three ways. Take turns choosing one card from the stack and explaining if it fits on any one of the ways. Be sure to explain your thinking. You can also use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number.

Math Talk: How are the four ways of representing numbers the same? How are they different? How is there a link between the numbers on the board? How do you figure out if a card fits on any of the ways? How does a zero in a number affect the way it is represented? Can you think of any other ways to represent numbers?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Place Value Memory

Materials: Place value cards (numbers), base ten block models, expanded form, and word forms.

Directions: Choose five sets of place value cards to use for this game. Shuffle them, face up and keep them face down in a stack of 15 cards. Take turns flipping over one card at a time to try to find a match. Explain to your partner why you chose a match and how you found it. If you don't get a match, flip the cards back over to be the other player's turn. The player with the most matches wins the game.

Math Talk: What strategies did you use to compare the numbers on the cards? Why is it important to understand a number's expanded form? What would you use to explain how to write expanded form to a student who didn't know? Why is it important to know how to read and write word numbers?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

3 Digit Biggie

Materials: 3 Digit Biggie game board to draw, number cards 0-9, green and blue markers, pencil and paper to keep score.

Directions: Turn the number cards face down and deal them into two piles and your partner each get a stack with the cards in it. Then you and your partner each flip over your THREE top cards and try to make the BIGGEST number possible on each part of the game board. For example, if you get a 5, 2, and a 9, you could make 529, 592, 259, and 295. How would you write to make 765 because it is the biggest number you can make with those three cards? The player with the biggest three-digit number wins the game.

Math Talk: To make the greatest possible number, in which place should you put your biggest number card? Why? How do you know when to stop? How did you know when to stop? How did you know when to stop?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

That's A Hundred

Materials: Two Base Ten Blocks Sorting Mats, base ten block manipulatives, two dice, pencil and paper to keep score.

Directions: Each player takes a sorting mat. Take turns rolling the two dice and taking that many ones from the base ten block manipulatives. Explain your thinking to your partner, especially when borrowing and regrouping! For example, if you have 100 and you roll a 2 and a 5, you would take 20 and 50 from the 100. How many tens do you have left? How many ones do you have left? How many tens do you have left? How many ones do you have left?

Math Talk: How could you tell when you needed to regroup? Why is regrouping necessary? What is the order to add and subtract—which digit should you start with? Why is using base ten blocks a good strategy for addition and subtraction?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Find My Numbers

Materials: Two Find My Numbers game boards, number cards 0-9, paper or math manipulatives, pencil.

Directions: You and your partner each take a game board. Place all the number cards in a face down stack. Then you each flip one card and place them on your board. You can use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number.

Math Talk: What strategies did you use for finding? Why? To which number should you look when adding? Why? How would you explain regrouping to your partner? How does place value help in your problem?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Roll It

Materials: Two Dice, Two Problem Solving game mats or place value protectors with Visual Math markers for each player (number and word forms).

Directions: Roll both dice, and on the side of your game board write down the number two digits that you can make. For example, if you roll a 2 and a 5, you would write 25. Then your partner should roll the same thing on his or her game board. Now roll the dice again and try to make the smallest two-digit number, and then the largest two-digit number. You can also use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number.

Math Talk: What strategies did you use to write the biggest or smallest number? How did the value of a digit change when its position in a number changed? How did you know what digit to start with when subtracting? What strategies did you use to compare your partner's answer?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

1, 2, 3, Show Me!

Materials: 1, 2, 3, Show Me board to draw, number cards 0-9, base ten block manipulatives, Problem Solving game mat with Visual Math markers and paper (word forms and number forms), pencil.

Directions: Put the number cards in a face down stack. You and your partner each choose from three number cards (depending on whether you want to study two or three digits) and place them on the game board in your own section. Decide which operation you will use to solve the problem. You can also use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number.

Math Talk: How did using place value help you solve? How did you use properties of operations to solve? What are some ways you can use place value to represent a number? How would your answer be different if you added 1 more? 20 more?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Hit the Target

Materials: Hit the Target game board, number cards 0-9, paper or math manipulatives, pencil.

Directions: Place all the number cards face down in a stack. You and your partner work together to take these cards from the stack and place them in any spots on the game board that you wish. This is the target number. You and your partner then draw two cards from the stack and try to use your ones cards to make a number that is as close as possible to the target number. You can also use the cards to help you write the number. You can also use the cards to help you write the number. You can also use the cards to help you write the number.

Math Talk: Is it possible to hit numbers in any order? Why or not? Can you use place value to help you solve? How can you figure out how many tens and ones are in a number? What would happen to the number's value if you switched two of your digits?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Build It, Add It, Subtract It

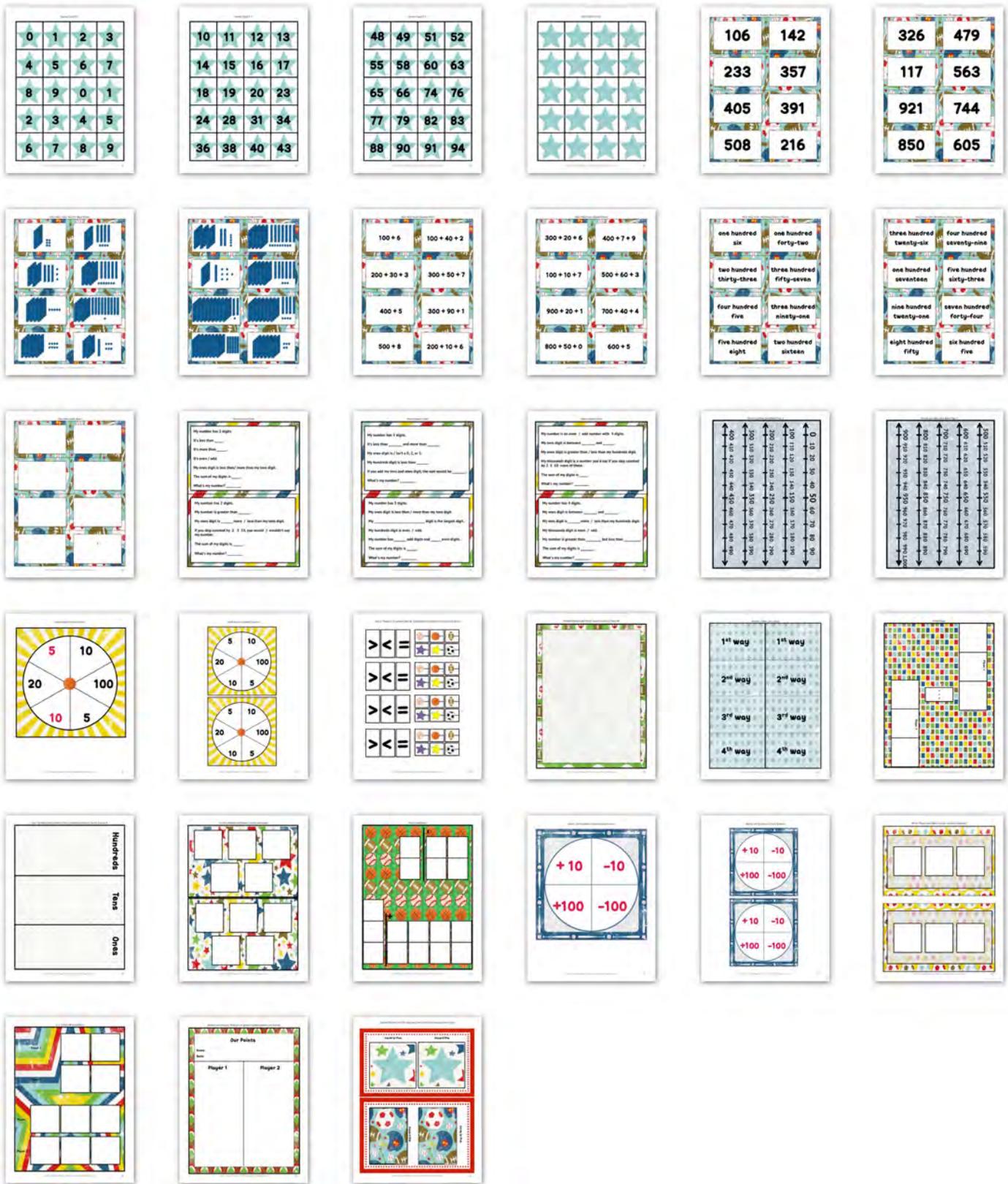
Materials: Base Ten Blocks Sorting Mat, Base 10 Add Subtract 100s, base ten block manipulatives.

Directions: You and your partner each choose a number between 100 and 500 and represent that number using base ten blocks. Take turns adding at each other's base ten blocks and copying the number your partner was building. Award your partner for each correct copy. Then take turns subtracting the number and use mental math to figure out the new number. For example, if your partner built 225 and you took 100, you would be left with 125. You can use the base ten blocks to check your work. Award each player a point for correctly figuring out the new number. Keep playing until you are out of blocks. The player with the most points wins the game.

Math Talk: What does zero represent in a number? How can changing one digit affect the value of a number? What strategies did you use when comparing numbers? What strategies did you use when adding/subtracting 100/1000?

ESOL Instructional Plan Note: This activity is designed to help students understand the relationship between numbers and their written forms. It is suitable for students with varying levels of English proficiency.

Game Resource Pages: Cards, Game Boards, Etc.



All Pages in Product

This image displays a comprehensive set of 100 educational worksheets for 2nd grade math, organized into a grid. The worksheets are categorized as follows:

- Administrative & Overview:** Important Notice, Table of Contents, and various introductory pages.
- Math Partner Games:** 14 games designed to practice 2nd grade number and operations in base ten.
- Place Value & Base Ten:** Worksheets on place value patterns, base ten blocks, and number lines.
- Number Lines & Counting:** Activities for counting by ones, tens, and hundreds, and understanding number relationships.
- Math Facts & Fluency:** Worksheets for practicing addition and subtraction facts.
- Number Sense & Operations:** Activities for understanding the relationship between addition and subtraction, and multiplication and division.
- Math Games & Activities:** Various interactive games and activities to reinforce math concepts.
- Assessment & Review:** Worksheets for reviewing and assessing student understanding.

The worksheets are presented in a grid format, with each page featuring a decorative border and clear, legible text and graphics. The pages are color-coded and include various mathematical symbols, numbers, and illustrations to engage students.

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61-62	Build It, Add It, Subtract It spinners
63	1, 2, 3 Show Me game board
64	Hit the Target game board
65-66	Optional score keeping sheet and card pile organizers

List of Games and Skills Covered

Pg.	Game Title	Main Skills	CCSS
20	Guess My Card	Understand the value of each digit; represent a number with base ten blocks	2.NBT.A.1
21	Mystery Number	Understand the value of each digit; skip counting by 2s, 5s, and 10s	2.NBT.A.1 2.NBT.A.2
22	Place Value Go Fish	Recognize the value of each digit in various representations (numbers, expanded form, word names, and base ten blocks)	2.NBT.A.1 2.NBT.A.3
23	Number Line Race	Count within 1,000 from any given number; skip count by 5s, 10s, 100s	2.NBT.A.2
24	Count On	Count within 1,000 from any given number; skip count by 2s, 5s, 10s,	2.NBT.A.2 2.NBT.B.5 2.NBT.B.8
25	Numbers 4 Ways	Recognize the value of each digit in various representations (numbers, expanded form, word names, and base ten blocks)	2.NBT.A.3
26	Place Value Memory	Read and write numbers in various representations (numbers, expanded form, word names, and base ten blocks)	2.NBT.A.3
27	3 Digit Biggie	Compare 3 digit numbers based on the value of each digit; use $>$ $<$ $=$ signs	2.NBT.A.4
28	That's a Hundred	Explain the value of each digit in a three digit number; use base ten blocks as an addition and subtraction strategy	2.NBT.A.1 2.NBT.B.5 2.NBT.B.9
29	Find My Numbers	Fluently add and subtract within 100, add 4 two digit numbers	2.NBT.B.5 2.NBT.B.6
30	Roll It	Fluently add and subtract within 100, add 4 two digit numbers	2.NBT.B.5 2.NBT.B.6
31	1 2, 3, Show Me	Represent three digit numbers; add and subtract within 1,000; explain why addition and subtraction strategies work	2.NBT.A.1 2.NBT.B.7 2.NBT.B.9
32	Hit the Target	Add and subtract within 1,000; explain why addition and subtraction strategies work	2.NBT.B.7 2.NBT.B.9
33	Build It, Add It, Subtract It	Add and subtract within 1,000; mentally add or subtract 10 and 100	2.NBT.B.7 2.NBT.B.8

Notes About Materials

Several games have multiple board game options and spinner options. You can choose the ones that best meet your class' needs as a whole, or differentiate the games by selecting game supplies based on individual student needs. Each of the spinners is available in a large and a small version, so you can print whichever one you prefer.

There are also optional card organizers and score keeping sheets to help students keep their materials organized during game play.

Be sure to print the game cards on stock paper or mount them on construction paper so students can't see through them!

The only items you need to supply in addition to the printables from this packet are:

- Class set of page protectors (or you can laminate items)
- Class set of Vis-à-Vis (or dry erase) markers for writing on page protectors
- Class set of felt squares, socks, or other "erasers" for page protectors
- Class set of pencils and paper or math journals
- Class set of base ten block manipulatives
- Half class set of dice (two per pair of students)
- Half class set of [clear spinner overlays](#), or paperclips to make your own spinners ([directions here](#)).

Game Materials & Assembly Instructions

Pg.	Game	Materials
20	Guess My Card	Two Base Ten Blocks Sorting Mats, place value cards (numbers are the easiest, but you could use number words, expanded form, etc.), base ten block manipulatives, pencil/paper to keep score (print pgs 38-45 & 58)
21	Mystery Number	Mystery Number cards in plastic page protectors, Vis-à-Vis markers, paper towels, blank paper or math journals, pencils (print pgs 47-49)
22	Place Value Go Fish	Place value cards (numbers and expanded form only, except for the challenge) print pgs 38-39 and 42-45)
23	Number Line Race	Number Line Race game boards (two pages), game pieces, Number Line Race spinner print pgs 50-51, 52 or 53, and 54)
24	Count On	Two dice, Problem-Solving game mat in a plastic page protector with Vis-à-Vis Markers for writing and paper towels for erasing (or use blank paper and pencils) (print pg 55)
25	Numbers 4 Ways	Numbers Four Ways game board for each player, place value cards (numbers, base ten block models, expanded form, and word names) (print pgs 34-36 and 56)
26	Place Value Memory	Place value cards (numbers, base ten block models, expanded form, and word names) (print pgs 34-36)
27	3 Digit Biggie	3 Digit Biggie game board to share, number cards 0-9, greater than/less than/equal sign cards, math journals or paper and pencils for keeping score (print pgs 34, 54, 57)
28	That's a Hundred	Two Base Ten Blocks Sorting Mats, base ten block manipulatives, two dice (print pg 58)
29	Find My Numbers	Two Find My Numbers game boards, number cards 0-99, paper or math journals, pencils (print pgs 34-36 and 59)
30	Roll It	Two dice, two Roll It games boards in plastic page protector with Vis-à-Vis markers (or math journals/paper and pencils) (print pg 60)
31	1 2, 3, Show Me	1 2, 3, Show Me board to share, number cards 0-9, base ten block manipulatives, Problem-Solving game mat with Vis-à-Vis markers and paper towels (or paper/math journals & pencils) (print pgs 34, 55, 63)
32	Hit the Target	Hit the Target game board, number cards 0-9, paper or math journals, pencils (print pgs 34 and 64)
33	Build It, Add It, Subtract It	Base Ten Blocks sorting mat, Build It Add I Subtract It spinner, base ten block manipulatives (print pgs 58, 60-61)

Math Partner Games: 2nd Grade Number & Operations in Base Ten

14 Common Core-aligned games for place value

How do math partner games align with CCSS?

The games in this PDF were created for (not retro-fitted to) the Common Core State Standards (CCSS) for second grade math. There is at least one game for each of the number and operations in base ten standards. The table on page 15 shows you which standard(s) are addressed in each game.

The standards as well as “I Can” statements with child-friendly language are included in each game’s instructions. Since there isn’t one set of “I Can” statements that all states use, I’ve chosen terminology that I think is simple and easy for you to make sense of.

Additionally, the “Model and reinforce mathematical practices” domain of the CCSS is integrated in each and every game through the actual game play, the “math talk” discussion/reflection prompts, or both. (You can find [more math talk questions here](#).) The standards for math practices are:

- MP1 Make sense of problems and persevere in solving them.
- MP2 Reason abstractly and quantitatively.
- MP3 Construct viable arguments and critique the reasoning of others.
- MP4 Model with mathematics.
- MP5 Use appropriate tools strategically.
- MP6 Attend to precision.
- MP7 Look for and make use of structure.
- MP8 Look for and express regularity in repeated reasoning.

What's a math partner game?

Similar to math tubs, the math partner games I use are two-player games that reinforce a variety of math skills, including problem solving and logical thinking. The games are open-ended and easily differentiated and individualized.

Are math partner games the same as math centers?

It depends on your definition. Typically in my classroom, partner game time is separate from center time because centers are independent activities while math games are multi-player and encourage discussion and collaborative problem solving. However, if you have students complete math centers cooperatively, then math partner games would be a perfect fit!

There IS one major difference between the partner game arrangement I describe here and typical centers. When kids are in centers, usually you (the teacher) are working with a small group. Since you're busy teaching, it's hard to tell whether the rest of the class is actually learning anything in their centers and games or if they've just mastered the art of looking busy.

During the math partner game set up I recommend here, you are *not* responsible for small group instruction, so you're free to facilitate students' thinking and engage kids in conversations about what they're learning.

What are the advantages of using math partner games?

Math partner games are a great opportunity for the teacher to:

- Take anecdotal notes and/or assess children in meaningful scenarios
- Support students who are struggling academically as well as socially, because you'll have the time to help solve disputes and model social problem solving skills
- Challenge high-achievers who are easily bored
- Allow students to actively construct knowledge through collaborative hands-on activities
- Model logistical thinking and encourage discussion (connecting words and math is difficult for many students)
- Provide problem solving and math skill practice that kids really enjoy

How many times do kids play the same game?

Generally, students play the same game for an entire week so that they have time to master the rules. Once they understand the basics, they can really start focusing on the targeted math skills, determining patterns and strategies, and engaging in higher-level thinking discussions.

For how long do kids play the games?

I prefer to have pairs of students work with each game for 7-15 minutes daily. Though some games naturally lend themselves to the shorter or longer end of that range, ten minutes is pretty optimal and a good target to aim for.

Though most of the games end only when time is up, ALL of the games are open-ended enough that students won't need to ask, "I'm done, now what should I do?" The instructions also provide Challenge activities which you can have students do if they have time, or you can assign them to certain students for differentiation. I usually have the class do the extra challenge for the last two or three days of the week, unless they haven't yet shown proficiency with the basic level of game play.

There are also Math Talk questions which you can have students reflect on in writing using math journals or other formats. Once a week (or even more often), you may want to allow several extra minutes for students to talk or write about the Math Talk questions.

How do I make time for math partner games?

There are many ways to incorporate game time into your schedule. I prefer using them daily for up to 15 minutes, but I've also used them as fun math practice on Friday afternoons for about 25 minutes each week.

For awhile, my district required that I conduct standardized test prep/spiral review practice with the kids for 20 minutes at the start of the math period. I chose to follow that with 10 minutes for math partner games, and then launched into my math concept/skill lesson for the day. The active, hands-on partner games were the perfect way to clear students' heads before instruction resumed.

The fact that math partner games are great for breaking up long periods of direct instruction and guided practice is increasingly important as the CCSS

moves us toward deeper study of math concepts. Many teachers now have longer math periods and are expected to spend several weeks on the same topic (whereas before, we might have only had several days per concept). Math partner games are a way to fill that extra time with meaningful opportunities for students to explore and talk about math concepts.

How are kids paired up?

I recommend that math game partners be selected by the teacher (rather than self-selected) so that students are paired homogeneously. This is important because if you have heterogeneous pairs (mixed ability levels), the less advanced child will lose frequently and get frustrated. Kids only enjoy playing the games if they regularly experience success and feel like they have a fair shot at winning.

Another reason why I think it's better to pair kids with similar ability levels for math partner games is so that game play can be differentiated. You'll be able to spend more time supporting your struggling students since they'll be working together. And having your highest-performing kids paired together will be extremely valuable for them because they can play quickly and enjoy being challenged in a way that doesn't always happen during the average mixed-ability cooperative activity. Since most of us have students work in mixed-ability groups throughout the school day, math partner games can be a rare opportunity for students to work one-on-one with another child who's learning at a similar pace.

I also think it's important to consider students' personalities when pairing. I don't like to pair kids who know each other too well because they'll play around, but if they don't like each other or are both very shy or competitive, there can be problems as well.



The image shows two tables. The first table, titled 'Math Game Partners', lists names in two columns: Partner 1 and Partner 2. The second table, titled '6 Minute Solution Partners', lists names in three columns: Partner 1 and Partner 2, with a third column for Partner 2.

Math Game Partners	
Partner 1	Partner 2
Gabriella	Fadlaine
Angel	Claritza
Rolando	Lucas
Mabelin	Ana Jennsy
Nickolas	Jerrell
Manny	Peterson
Amy	Keisha
Carlo	Anna
Isaiah	

6 Minute Solution Partners		
	Partner 1	Partner 2
A	Gabriella	Angel
B	Claritza	Amy
C	Fadlaine	Keisha
D	Peterson	Manuel
E	Isaiah	
F	Rolando	Lucas
G	Nickolas	Mabelin

Pages 18 and 19 are blank partner lists which you can fill out and display so students know who their partners are. Before sending students off to play the games, I usually have the class look at the list and raise their hand if their partner is not in the room so that I can re-partner students for the day as needed.

I generally make changes to the partner list based on my observations and student input. I've found that some kids want to keep the same partner for months, but most kids want to change partners every few weeks, and I try to accommodate them either way so they enjoy the games more.

For variety, I do allow students to pick any partner they want on special occasions (short weeks, days when we have an assembly and the math block is cut short, etc.) as well as when we go back to review previously taught skills. Some kids choose to play with friends that are more or less advanced than them, and that allows them to experience the game in a different way. Interestingly, I've found that about half the students still choose their regular math game partner: the kids tend to get into certain rhythms and playing styles and enjoy the familiarity.

Can students choose the game they want to play?

Yes! After a few weeks when you have introduced several games, you can let each set of partners choose one of the games to play, and have the class practice playing different games at the same time. I highly recommend doing that occasionally throughout the year, such as:

- ◆ Short weeks when you only have school for 2-3 days and therefore don't want to introduce a new game.
- ◆ When you want to review a variety of skills and concepts. Do two or three 10 minute sessions back to back, and let kids change their games for each session.
- ◆ When a lot of students are absent: let kids pick their own partners and own games for a special treat.
- ◆ At the end of the year when you have already introduced all the games.

When students are all playing different games, you may need to have printed directions available in case kids forget the rules. You should also talk with students about what they should do if they get stuck.

How do I use the "Challenge" section of the games?

You can offer the challenge as an option for students if they'd like to try it, or assign it only to certain students to differentiate game play. Another idea is to use that section after students have played the regular way several times, or later in the school year when reviewing previously taught skills.

How do I use the “Math Talk” section of the games?

You can teach students to talk about these questions with their partners, or ask the questions yourself as an informal assessment while observing game play. Or, use the Math Talk questions to facilitate mini-lessons and/or debriefing sessions before and after game play. The questions also work well as math journal prompts and written reflection topics.

How do I introduce math partner games to my class?

I strongly recommend that you model how to play the games FIRST.

Introduce the games one at a time to your class, one game per week. During the modeling, you can demonstrate the basics of the game by playing against a volunteer. I used an Elmo (document camera) to help with this, placing the pieces under the Elmo so the class could see what was happening. I then guided two other volunteers as they played together for the class. This technique is a great way to model mathematical thinking and reasoning and draw attention to the math strategies you want students to use.

Right after the modeling/demonstration, release students to try playing the game with their partners. If you see a lot of kids making the same mistakes or demonstrating major misconceptions, end the game time a little early. Talk about it afterward, and do more modeling the next day.

For younger students (and for most classes at the beginning of the year), I’d suggest modeling the game on the first *two* days students play it. The first day, your demonstration should be very in-depth and focus on what to do if kids get stuck or disagree with one another, as well as what to do when they’re finished and how to clean up the game properly. The second day’s demonstration can focus more on applying math skills and strategies. I often do two or three days of demonstrations/skill mini lessons with more complex games, even if it’s just a quick refresher with two student volunteers before releasing the rest of the class to play.

Why not have kids play all different games at once, like in math centers?

I like having the whole class play the same game because you can conduct mini-lessons/strategy discussions around shared experiences before and after game play. Also, since students play the same game for a week, you have lots of targeted opportunities for identifying and addressing misconceptions and scaffolding student learning.

Could the games also be used as centers?

Sure! It's totally your choice how to use the games—they'd work just fine in traditional centers, math tubs, math work stations, etc. You could choose to play some of the games using the system I describe here, and place the rest in centers for kids to explore independently. **I do still recommend you model game play for the students before expecting them to play on their own.**

How do I open the math partner game time?

When you first introduce a game at the beginning of the week, you'll start your math partner game time with modeling. By mid-week, you can start the time with a mini lesson focusing on the higher-order thinking skills you want students to develop. You can pose particular scenarios that might arise during game play and have students suggest strategies for solving them, or mention a challenge that one team of students experienced the day before and have students talk about what they would do. You can also mention any classroom management issues that arose, or remind students of skills and strategies you'd like them to apply.

How do I close the math partner game time?

You can end the math partner game time with a whole-class debriefing session. Students can talk about which strategies worked well and which didn't. Use the Math Talk questions provided for each game to help you facilitate the discussion. Students can also reflect on these questions in writing (i.e. in math journals), or by talking with their partner (or a different partner in a turn and talk or think-pair-share activity.)

You can switch up your approach as needed, or make a schedule and debrief in a different way each day of the week. Again, the conversations will be more superficial at the beginning of the week and will move toward critical thinking as students have more experiences with the game.

How do I store and organize math partner games?

You'll need to have *half* a class set of all your game cards and most of the materials, such as spinners. In other words, if you have 26 students, you need 13 sets of each game. In many games, students share a game board, so you only need a half class set of those, but in other games, students will each need their own board.

The type of organizational system you choose should be based on the materials you have and the size/type of your math games. If you have lots of larger materials that you're using in addition to the games in this PDF, you'll need to consider that in your planning. I'll share with you the systems I've used over the years, and then explain what I think is the best way to organize and distribute this particular set of games.

My first year using math partner games, I simply had a milk crate full of plastic baggies with materials inside. As my collection of games grew, I started keeping the plastic baggies in plastic tubs (containers). Some were the small kind you'd find at the dollar store and some were larger like dishwashing tubs, depending on the size of the materials that went inside.



Eventually I found the toy organizer you see pictured above. (Mine was from Big Lots, but I believe you can still get something similar at Target.) I used the large, colorful bins to hold the partner games my class was currently using. There was one bin for each game, and each bin held the set of materials for that game. For most games, I had a plastic baggie or manila envelope for each pair of students, so the bin for a certain game

usually had about a dozen baggies or envelopes inside. The games for units we weren't currently studying were hidden away in cabinets or other plastic containers.

I also kept one set of each game in a hanging shoe organizer, which you could see hanging on the door in the previous page's picture and as a close up below. Later in the school year, I'd allow students to choose the game they wanted to play. Each set of partners would simply walk over to the shoe organizer, pick a game and take out the materials, then return them after game play. I also allowed students to use the games in the shoe organizer at other times in the day (before and after school, during indoor recess, etc.) We called it "Free Choice Math Partner Games." I had a milk crate to hold the games that were too large to fit in the shoe organizer.



How do I pass out and collect the games?

For the games in this PDF, I recommend using just two baggies for each pair of students, one for the place value cards and one for the number cards. There will be times when you want kids to use multiple sets of cards during a single game, so having similar cards altogether makes sense and saves you plastic baggies. It's not a bad idea to mark some place on each card with a symbol, color, or number to indicate which bag it came out of, in case a stray piece is found on the floor.

Each day as you begin math partner games, write on the board which cards students should take out of the baggies. They can leave the rest of the cards in the bag (or even choose to include them if they decide with their partners to make the game more challenging.)

Each set of game boards could be kept in a single file folder or manila envelope: ditto with other materials needed, like the spinners. When you're ready for students to play a game, place the file folder full of game boards (or other materials) and the corresponding set of baggies on a table. Have all the "Partner 1s" in your math partner list (see pages 18-19) come up to the table in an orderly line and take one of everything. The Partner 2's are responsible for returning the materials to the same spot after game play.

If you practice your expectations for this, the system for distributing and collecting game materials will go very, very quickly. Sometimes it helps to set a timer for one minute: at the end of the minute, all the partner 1s should have the necessary materials and both partners should be in their "spot" in the room where they play the math partner games. If there is any pair of students who has not yet begun game play when the timer goes off, you can assist them with whatever they need to get started.

How can I save ink, paper, and time?

Some of the same cards and game boards can be used for multiple games, so that helps a lot. Here are some other tips to help you save ink, paper, and time as you create the games:

✓ **Pick the games you want to use, and THEN print.** You'll probably find that there are more than enough games here and you won't have time to implement them all, so don't print anything until you're sure you'll use it.

✓ **Be selective about the game resources you print.** There are multiple game boards and spinners for some games so you can differentiate game play for students. You might not need them all.

✓ **Use only a digital copy of the game instruction sheets.** You can use an LCD projector with a document camera or interactive whiteboard to project the directions for the class to see if needed. But the only time you'll need a printed copy (other than possibly for yourself) is if you decide to place one copy of the game in a Free Choice Math Partner Game area like the hanging shoe organizer I described, or if you want kids to use the games in math

centers/stations. In those instances, you could print a single copy of the instructions. But, for regular math partner game time, it's not necessary to print the instructions for each pair of kids. You will have already modeled game play for the class multiple times (which means they'll know the game far better than if they'd just read the directions), and you'll be walking around the room facilitating as kids play in case they need help.

✓ **Print most (or all) of the game resources in black and white and have students color them for you. Or, print onto colored paper!** Black and white copies can still be very visually appealing, and you have the option of printing onto colored stock paper or using colored pencils/markers to add interest. You may want to print your class set in black and white, and then make one or two full color copies to use when modeling the game for the class and for later on if you place the games in your math centers or stations. You can let a different pair of students use the full color version each day as recognition of exemplary work in the previous day's math game time.

I'm ready! How do I get started?

Start by figuring out which standards you want students to practice through the games. The table on the next page of this packet tells you which games align to each standard.

Read the instructions for the games you're interested in, and check out the game resources (game boards, cards, etc.). Decide which ones are the best fit for your students' needs, and print! Use pages 16-17 to help you assemble the games and collect any extra materials you might need. Have fun!



BUT WAIT! THERE'S MORE...

I'm **Angela Watson**, the creator of this resource. I'm a National Board Certified Teacher with a masters degree in Curriculum and Instruction, and have 11 years of classroom teaching experience and over a decade of experience as an instructional coach. I currently work as a Productivity and Mindset Specialist in the area of educational consulting. In practical terms, this means I author books, design curriculum, and provide professional development services. Everything I do is centered on sharing more effective, efficient, and enjoyable ways of teaching and learning!

I founded my website ([TruthforTeachers.com](https://www.truthforteachers.com)) in 2003 to connect with other educators. You can now find thousands of ad-free articles and resources there from me and our K-12 teacher-writer's collective.

Check out my other resources below:

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