

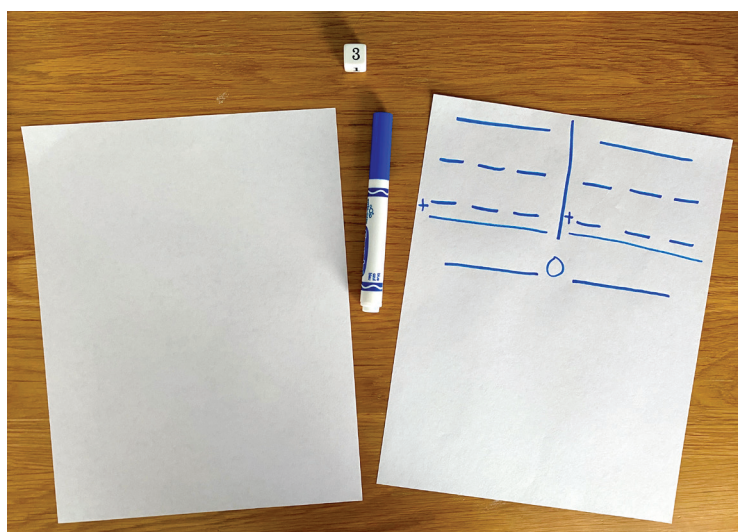
Sum It Up

Object of the Game

Players take turns rolling a die to build two 3-digit numbers. Players add their numbers together, and the one with the greater sum wins.

Materials

- Die numbered 1–6
You can also use a digital die like the one at www.calculator.net/dice-roller.html or make your own according to instructions at www.firstpalette.com/craft/paper-dice.html. Another option is to write the numbers on small pieces of paper and place them in a cup. For each turn, pull a slip of paper out of the cup.
- Sum It Up Record Sheet
Print the record sheet or make your own.
- Pencil, pen, marker, or crayon
- Paper for drawing base ten pieces to help you add.
You can also print [Base Ten Pieces](#).



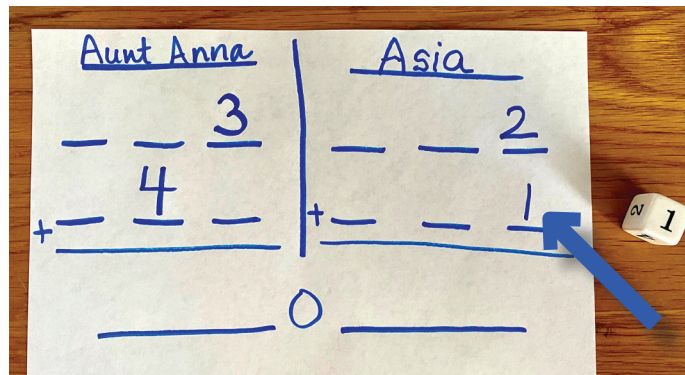
Skills

This game helps us practice

- Adding numbers up to 1000
- Understanding that a 3-digit number has hundreds, tens, and ones
- Comparing 3-digit numbers using the greater than ($>$), less than ($<$), and equal ($=$) symbols.

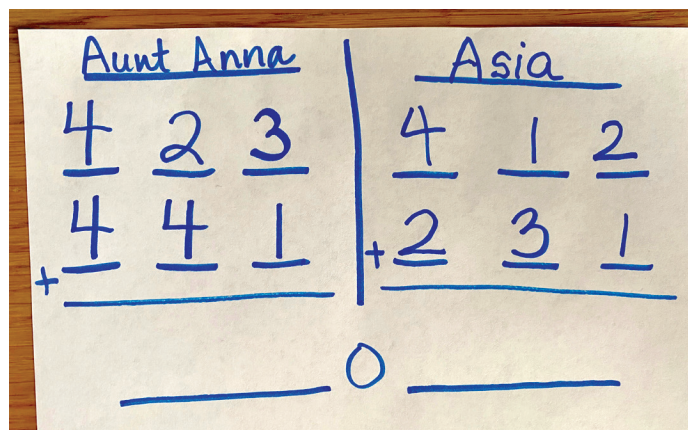
How to Play

- Get ready to play the game:
 - » Players share the die and record sheet.
 - » Each player needs scratch paper and a pencil or pen.
 - » Decide who will go first.
- Player 1 rolls the die. They write the number rolled in one of six spaces on their side of the Sum It Up Record Sheet.
 - » Players can write their number in any available space, in either the top number or the bottom number!
 - » Once a number has been placed, it can't be changed.
- Player 2 rolls the die and writes the number rolled in one of their spaces.

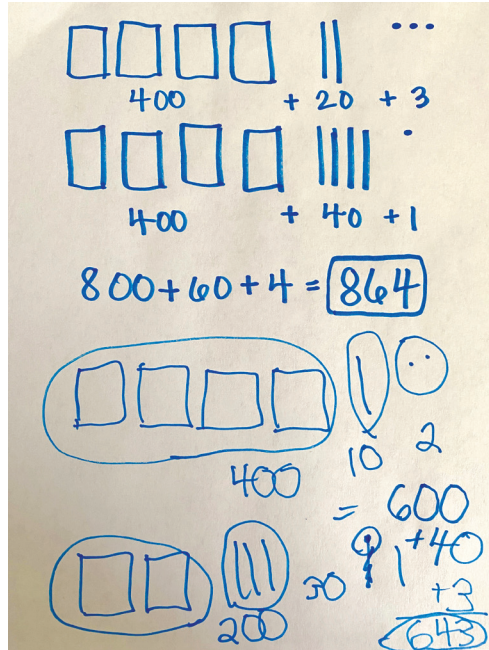


Asia rolled a 1, and she placed it in the ones place because she is hoping to roll a larger number for the hundreds or tens, if possible.

- Play continues until each player has taken 6 turns and made two 3-digit numbers.

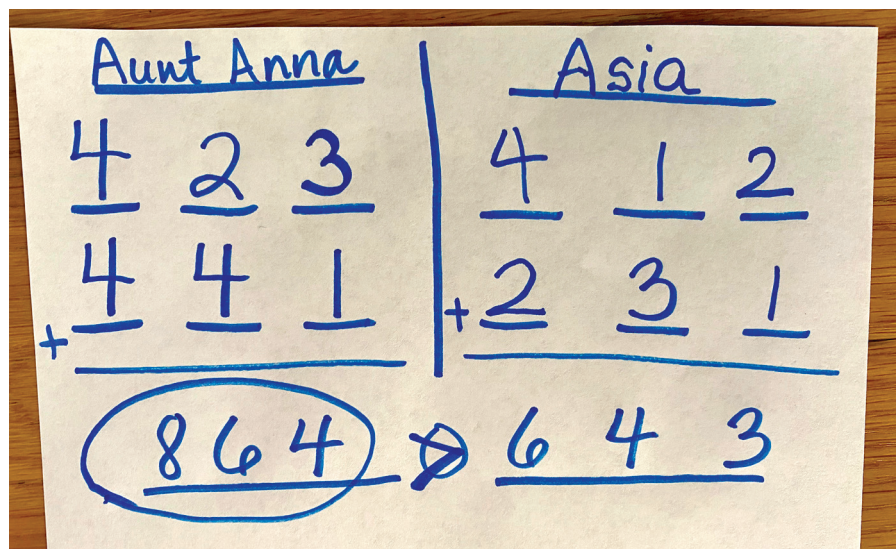


5. Then, players add their numbers together to find the sum (a total when added).
- » Draw base ten pieces to help you add. You can also use the printable base ten pieces included with this game, the free Number Pieces app at www.mathlearningcenter.org/resources/apps/number-pieces, or use a strategy that makes sense to you.



6. Players record their sum on the record sheet, and then work together to write $>$, $<$, or $=$ to compare them. The player with the greater sum wins.

> Greater than < Less than = Equal to

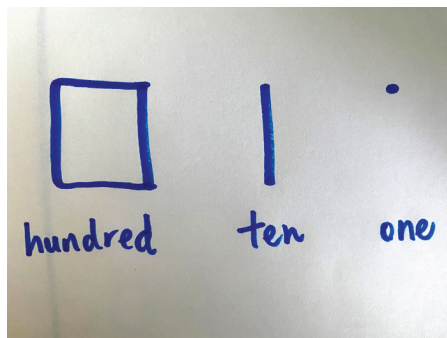


Aunt Anna won this round because her total, 864, is greater than Asia's total of 643.

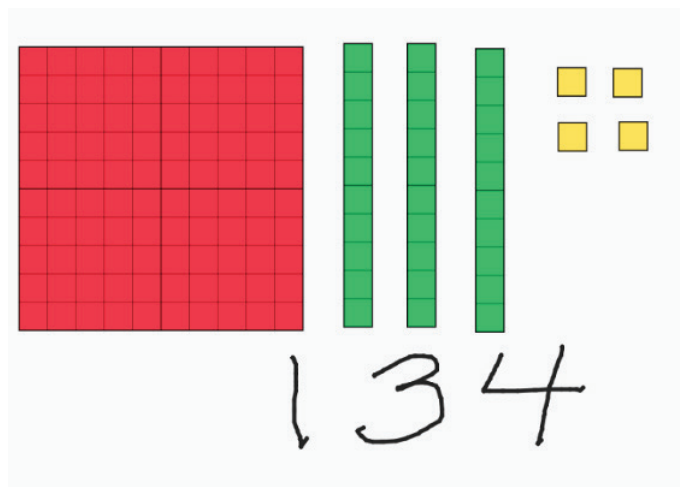
Tips for Families

Before you play:

- Talk about place value. Help your child remember that a 3-digit number has hundreds, tens, and ones. For example, the number 351 has 3 hundreds, 5 tens, and 1 one.
- Ask: *If you roll a _____, where do you think you would put it? Why would you make that choice?*
- Practice drawing quick sketches to show a 3-digit number. It's easy! Here is what they look like:



- You could also use the free Number Pieces app, available at www.mathlearningcenter.org/resources/apps/number-pieces, to practice building numbers.



During the game:

- Ask questions:
 - » Which number are you hoping to roll next? Why?
 - » Why did you decide to put the number in the (ones/tens/hundreds) place?
- Allow your child to add the numbers using a strategy that makes sense to them. They may want to use the base ten pieces, a number line, or another strategy. Ask questions as they work to learn more about their thinking.

After the game:

- Ask:
 - » *Was there a point in the game when you wished you could move a number to a different place? Why?*
 - » *If you wanted to explain to someone else how to play this game, what would you tell them? What advice would you give them for making winning numbers?*

Change It Up

Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below. How did it change your strategy for winning the game?

- Before you begin, flip a coin. If it lands on heads, play to make the greater sum. If it lands on tails, play to make the smaller sum.
- Play to record two 2-digit numbers instead of two 3-digit numbers.
- Play cooperatively, rolling the die and working together to write in numbers to get the greatest or smallest possible sum.
- Try playing with 3 or 4 players.

Sum It Up Record Sheet

Player 1: _____

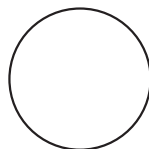
Player 2: _____

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Cut apart on thick black lines

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