Squeeze Me!

Guess a secret number between 1 and 100 in this three-player game.

What you need
A number line that has numbers 0 to 100 (or a meter stick works well)
Coins or other place markers
Two chopsticks or other small sticks (unsharpened pencils work well)
Paper and pencils

What to do
1. Decide who will go first. The first player chooses a whole number between 1 and 100 and writes it down onto a sheet of paper. Fold and put the paper off to the side so no other players can see the number.
2. The other players take turns trying to guess the secret number.
3. To guess a number, they announce the number and place the coin onto the number located on the number line.
4. The secret number player says if the guess is lower or higher than the actual number.
5. The guessing player moves the sticks to show the range of numbers remaining.
6. For example, if the secret number is 23 and the coin was placed on the 28, the guess is too high. The secret number player will say, "too high" and the guesser will move the upper stick to the 28, showing the next person should guess between 1 and 27.
7. The first person to guess the number correctly wins.
8. The next player becomes the secret number player.

What to ask
• How can you use your previous guesses to make your next guess?
• Why did you choose that number for your guess?
• What is happening to the space between the two hands after each guess?

Did you know?
Making estimations is often a very strategic way of thinking. Although some initial guesses begin as wild approximations, many have a reference to begin. For instance, if someone asked an adult to guess how many people attended a basketball game, they would use a number that would be reasonable, like a number in the thousands.

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What's next?
- Increase the range to 200. How does this change your guessing strategy?
- Try playing this game without the number line, like while you are taking a trip in the car or waiting in line.

To learn more

Counting On Frank
by D. Clement

In addition to being an excellent book for talking about estimation, this story uses proportional comparison to answer questions like "How many Franks (the dog) would it take to fill up my room?"

Coyotes All Around
by Stuart J. Murphy

A pack of coyotes tries to determine how many roadrunners and other creatures are in their vicinity, and while some count different groups and add their totals together, Clever Coyote rounds off and estimates.

How it helps with school

Texas Essential Knowledge and Skills (TEKS) Standards
Number, Operations and Quantitative Reasoning: 3.1B; 4.1A; 5.1A
Patterns, Relationships, and Algebraic Thinking: 3.6A; 4.7; 5.5B
Probability and Statistics: 3.14A-B; 5.12B
Underlying Processes and Mathematical Tools: 3.15C-D, 3.16A, 3.17A-B; 4.14C-D, 4.15A, 4.16A-B; 5.14C-D, 5.15A, 5.16A-B

National Council of Teachers of Mathematics (NCTM) Standards
Number and Operations, Algebra, Data Analysis and Probability, Reasoning and Proof, Communication