## **Prime Number Hunter**

Prime numbers are tricky; plenty of numbers that seem like they would be prime numbers turn out to have at least a couple factors, making them composite. Wondering how to help your child get a handle on prime numbers? Turn her into a prime number hunter with this game that will have her scouring a hundreds chart with the goal of locating any and all prime numbers.

## What You Need:

- Colored markers
- Printable hundreds chart

Review: A prime number is a whole number greater than zero that has exactly two different factors, one and itself. For example, the number 3 is a prime number because its only factors are 1 and 3. In contrast, a composite number is a whole number greater than zero that has more than two different factors. The number 6 is a composite number because its factors are 1, 6, 2, and 3.

It's important to note that the number 1 is neither prime nor composite. It's not prime because it does not have exactly two different factors. It's also not composite because it does not have more than two factors. One is a very special number.

## What You Do:

- 1. Print out a copy of a hundreds chart. Cut or fold the hundreds chart in half if you only want to focus on the prime numbers through 50.
- 2. Take a moment to review what makes a prime number. Then let the game begin!
- 3. To play, tell your child that you will be competing to cross out all the composite (non prime) numbers, and circle all the prime numbers. Designate one color marker for the prime numbers, and another to cross out composite numbers.
- 4. Each player will take turns crossing out a composite number (1 point), circling a prime number (3 points), or "passing." The game will get easier as more numbers are crossed and circled, but the bigger numbers may present more of a challenge to your child. You might need to take your child through the definition of prime numbers a few times as you look at different numbers.
- 5. The player with the most points at the end wins!

After you have played the game, check your answers. The prime numbers through 50 revealed from this activity are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, and 47.