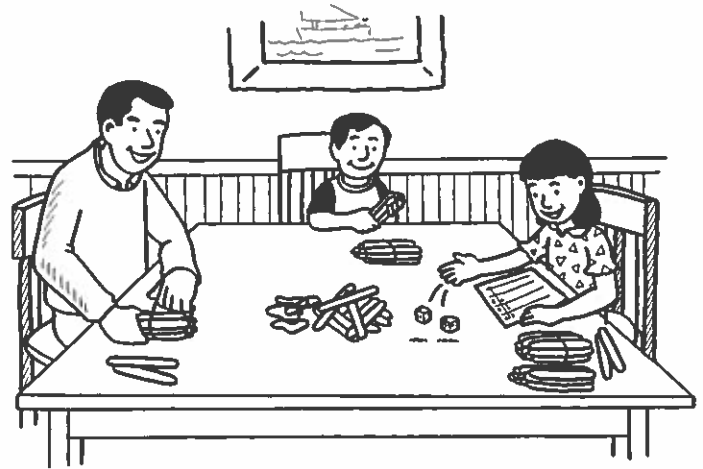


All About Place Value



Would your child rather have \$1, \$10, or \$100? Although all of those amounts start with a 1, the 1 is worth a lot more when it's in the hundreds place!

Use these activities to help your youngster understand that a number's place is always important.

Bundles of sticks

Let your child practice making groups of 10 with this game. She will see that the tens, along with the "leftovers" (ones), give us the digits that go in the tens and ones places.

You'll need two dice, rubber bands, and a bag of craft sticks. On each turn, roll two dice, say the total, and take that number of craft sticks. Once a player has 10 sticks, she gets to put a rubber band around them and set the cluster aside. *Tip:* As you play, ask your youngster, "How many more sticks do you need before you have another ten?"

The winner is the first person with three clusters of 10. Have your child write down how many sticks each player has. If she has 3 clusters and 5 leftover sticks, she would write 35. Explain that the 3 tells how many tens she has and the 5 tells how many ones.

Collection counting

Show your youngster how tens and ones can make it easier for him to count a large number of items.

Encourage him to gather small objects like acorns or beads. Then, ask him how many he has. If he tries to count each item individually, he will probably discover that it's easy to lose track. Ask, "Is there an easier way to count these?" He



might put them in groups of 2 or 5, for instance, and then you could say, "Could you try piles of 10?" He can first count the tens ("10, 20, 30...") and then the ones ("1, 2, 3, 4"). How many does he have in all?

Variation: Let your child put small stickers (stars, smiley faces) all over a piece of construction paper and count them. Drawing a circle around each group of 10 will make counting easier.

Snack-time strategy

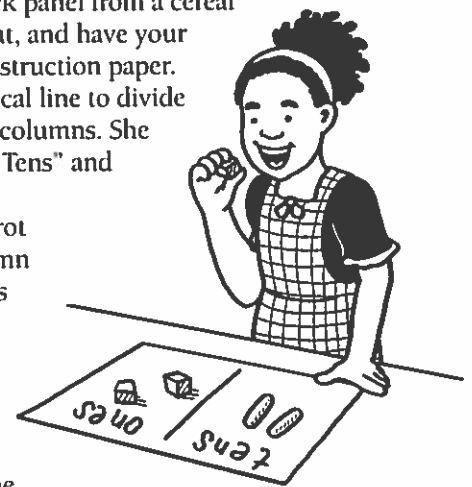
Here's a tasty place-value activity that your youngster can do every time she eats a snack. It will help her remember which is the tens place and which is the ones place.

Cut the front or back panel from a cereal box to make a placemat, and have your child cover it with construction paper. Tell her to draw a vertical line to divide the placemat into two columns. She can label the left side "Tens" and the right side "Ones."

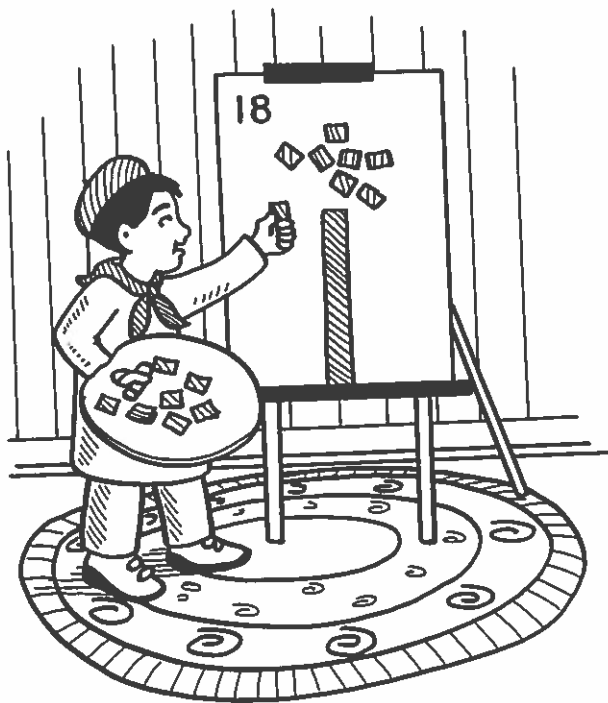
Next, put some carrot sticks in the tens column and some cheese cubes in the ones column, and ask her to tell you what number you made. If you use 2 carrot sticks and 3 cheese cubes, she

should say 23. As she eats each piece, she can say the new number. *Example:* If she eats one cheese cube, her new number is 22, and then if she eats a carrot stick, she would be down to 12. After her last bite, she gets to call out, "Zero!" and then give you a number to figure out.

Variation: Suggest that she make a three-column placemat for hundreds, tens, and ones. Square crackers could represent hundreds.



continued



Art with tens and ones

With this art project, your youngster will see that numbers are made of tens and ones.

Cut several different colors of construction paper into strips. Leave half of the strips intact (these represent tens), and cut each of the other strips into 10 equal squares (these are ones). To help your child understand that one strip is equal to 10 squares, give him a strip, and have him cover it with squares. Ask him to count how many squares he used (10).

Then, write a two-digit number (18) at the top of a large piece of paper. Let your youngster glue the tens and ones on a piece of paper to make a colorful picture showing your number. For instance, he might use a ten for a tree trunk and 8 ones to make the branches. Can he think of a different way to make 18? (He could use 18 ones to create a rainbow.)

Place-value “war”

This twist on the card game war will help your child learn to compare two-digit numbers. Encourage her to pay close attention to each number’s place to determine which one is the biggest.

Deal a deck of cards (face cards removed) evenly to players. On each round, every person flips over two cards. Each player then arranges her cards to make the largest possible two-digit number (ace = 1). For example, if your youngster gets a 2 and an 8, she should make 82.

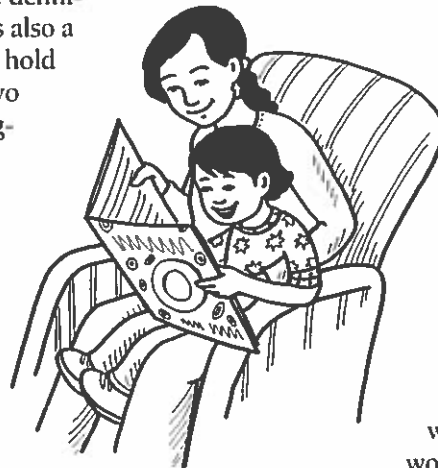


Ask your child which number is the biggest. The person who made it gets to keep all the cards in that round. (If there’s a tie, draw two more cards each, and the winner of that round takes all the cards.) Play until you’ve used all the cards—whoever has the most wins.

Zero the placeholder

Zero means “nothing,” right? That’s one definition of zero—but this important number is also a *placeholder*. For instance, without a zero to hold the ones place, 20 would be 2. Try these two suggestions to show your youngster the significance of zero:

- Read library books. In *Zero* (Kathryn Otoshi), a sad zero feels like she’s worth nothing. But she soon learns that she makes a difference by teaming up with other numbers. Or try *Zero Is the Leaves on the Tree* (Betsy Franco). Your child will discover that zero is used for lots of things—from the number of sleds on the hill after the snow



melts to the number of kites flying when the wind isn’t blowing. Ask your youngster to come up with more “definitions” for zero!

- What would happen if we suddenly had no zeroes? Have your child list numbers your family uses that contain zero. For example, maybe her mom is 30 years old, her dad wears a size 10 shoe, and her favorite movie is *101 Dalmatians*. Encourage her to write the numbers without the zeros. She’ll laugh to see that her mom would be 3, her dad would wear a size 1 shoe, and the movie would have only 11 dogs!