Style Sheet

Common Core Standard	Basically this means your child can….
Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	Understand similes and metaphors.

Background Information:

By the end of fifth grade, children should be able to understand, explain, and use patterns when multiplying numbers by powers of ten. They should know that when multiplying a number by any power of ten, the first digit of the answer will be that number, followed by zeros. They should recognize that the number of the exponent is how many zeros will follow the original number. For example, the number 7 multiplied by different powers of ten:

$$7 \times 10^3 = 7{,}000$$

$$7 \times 10^5 = 700{,}000$$

Here is an example multiplying the number 68 by different powers of ten:

$$68 \times 10^4 = 680{,}000$$

$$68 \times 10^2 = 6{,}800$$

What You Need:

- A storybook
- Question cards (see following)
- Scissors

Activity Instructions:

In this activity, you and your child will have fun playing bingo to practice multiplying whole numbers by powers of ten.

1. Ask your child to cut out the attached bingo call-out cards cutouts and bingo cards cutouts in the resources section.
2. Give a bingo card to each player (up to four players).
3. Choose a player to be the caller. Have the caller shuffle the bingo call-out cards and place them in a pile.
4. Each player can use a marker (such as a coin or a bean) to mark off the "Free Space" square on their bingo card.
5. Have the caller take the top card from the call-out cards and read it aloud. All players look for the answer to the math problem on their bingo card. Provide paper and pencil for players to work out the math problems. The caller should set aside cards that have been called into a discard pile to verify answers later.
6. Any player who has the correct answer on their card should place a marker on that square on their bingo card. When all players are finished marking their cards, the caller reads the next card aloud. Play continues until a player gets "bingo" (five squares in a row marked off, either horizontally, vertically or diagonally).
7. When a player thinks they have "bingo", they should call out "Bingo!" The caller should use the discarded cards to check the player's answers and verify that they marked their card correctly. If they have all correct answers, that player is the winner.
8. Play as often as you like, making sure to switch bingo cards and shuffle the call-out cards for each new game.

Bingo Call-out Cards Cut-Outs

$3 \times 10^3 =$	$17 \times 10^2 =$	$6 \times 10^7 =$	$14 \times 10^5 =$	$6 \times 10^6 =$
$75 \times 10^4 =$	$7 \times 10^5 =$	$140 \times 10^2 =$	$43 \times 10^3 =$	$37 \times 10^6 =$
$86 \times 10^4 =$	$17 \times 10^1 =$	$27 \times 10^5 =$	$37 \times 10^4 =$	$742 \times 10^3 =$
$430 \times 10^4 =$	$92 \times 10^5 =$	$2 \times 10^2 =$	$75 \times 10^5 =$	$3 \times 10^1 =$
$571 \times 10^1 =$	$2 \times 10^7 =$	$17 \times 10^3 =$	$92 \times 10^4 =$	$43 \times 10^6 =$
$86 \times 10^2 =$	$750 \times 10^2 =$	$482 \times 10^3 =$	$111 \times 10^4 =$	$86 \times 10^6 =$
$935 \times 10^3 =$	$43 \times 10^2 =$	$60 \times 10^4 =$	$52 \times 10^5 =$	$982 \times 10^4 =$

B	I	N	G	O
3,000	1,700	60,000,000	1,400,000	6,000,000
860,000	43,000,000	2,700,000	370,000	742,000
5,710	20,000,000	**Free Space**	17,000	920,000
75,000	86,000,000	935,000	4,300	600,000
700,000	14,000	43,000	8,600	482,000

B	I	N	G	O
750,000	700,000	14,000	43,000	37,000,000
4,300,000	9,200,000	200	7,500,000	30
170	8,600	**Free Space**	482,000	1,110,000
5,200,000	9,820,000	3,000	1,700	1,400,000
860,000	370,000	5,710	920,000	6,000,000

B	I	N	G	O
600,000	30	20,000,000	5,200,000	9,820,000
4,300	86,000,000	1,110,000	935,000	75,000
1,700	43,000,000	**Free Space**	200	9,200,000
7,500,000	742,000	4,300,000	2,700,000	170
37,000,000	750,000	1,400,000	60,000,000	3,000

B	I	N	G	O
43,000	700,000	170	370,000	60,000,000
4,300,000	9,820,000	60,000	9,200,000	935,000
75,000	8,600	**Free Space**	920,000	7,500,000
1,110,000	30	14,000	1,700	5,200,000
200	750,000	17,000	860,000	20,000,000