

Pumpkin Seed Multiplication

Teaching Suggestions

Pumpkin Seed Multiplication is a hands-on activity to help students make the transition from addition to multiplication. For each pair of students, you'll need a game board, a set of directions, a set of Addition Sentence cards, a set of Multiplication Fact cards, and a small bowl of about 35 "pumpkin seeds." You can use real pumpkin seeds (dried, of course!) or any small item such as dried beans, paperclips, plastic chips, or unit cubes. If you would like to create additional number sentences and multiplication facts, use the blank cards on the last page.



Before introducing the game, make sure students have had other opportunities to explore the meaning of multiplication and how it relates to addition. They should have already been introduced to the idea that a multiplication fact such as "3 x 5" means "3 groups of 5" and is equal to "5 + 5 + 5." Start off by choosing a student to help you model the game in front of the class. Review the directions on the next page and demonstrate how to do each step. Note that this is a learning game, not a competitive game, and there are no winners and losers. Then assign partners and hand out the materials, or allow students to play the game in a math center. The game does not require students to write down the number sentences and total seeds, but you can certainly have them do that in a math journal.

Note: This lesson is adapted from Fishbowl Multiplication, an activity in Mastering Math Facts - Multiplication and Division, Laura's next Power Pack!

Pumpkin Seed Multiplication

What is the Total Number of Seeds?

Addition Number Sentence: =

Multiplication Fact:

Pumpkin Seed Multiplication

$3 + 3 + 3 + 3 + 3$	5×3
$7 + 7 + 7$	3×7
$2 + 2 + 2 + 2 + 2$	5×2
$5 + 5 + 5 + 5$	4×5
$8 + 8 + 8$	3×8
$7 + 7 + 7 + 7$	4×7
$4 + 4 + 4 + 4 + 4$	5×4
$9 + 9$	2×9

Pumpkin Seed Multiplication



Number of Players: 2

Materials: Pumpkin Gameboard

Addition Number Sentences and Multiplication Facts

Bowl with 35 Seeds (paperclips or other small objects)

Directions:

1. Cut apart the Addition Sentence and Multiplication Fact cards and separate them. Place the Addition Sentences face down in a pile. Spread the Multiplication Facts out on the table, face up.
2. Decide who is Partner A and who is Partner B. Partner A chooses an Addition Number Sentence and places it face up in the box at the bottom of the page. He or she uses the numbers on the card to fill the pumpkins with equal groups of seeds.
3. Partner B finds the matching Multiplication Fact and places it face up in the other box. Partner B then counts to find the total number of seeds and announces it to Partner A.
4. If Partner A agrees, remove both cards and set them aside. Put all the seeds back in the bowl. If not, recount the seeds.
5. Repeat steps 1 - 4, with Partner B choosing the Addition Sentence and Partner A finding the Multiplication Fact and counting the seeds.
6. Continue taking turns until all the cards have been used or the time runs out.



Pumpkin Seed Multiplication



**What is the
Total Number
of Seeds?**

Addition Number Sentence

=

Multiplication Fact



Pumpkin Seed Multiplication



$$3 + 3 + 3 + 3 + 3$$

$$5 \times 3$$

$$7 + 7 + 7$$

$$3 \times 7$$

$$2 + 2 + 2 + 2 + 2$$

$$5 \times 2$$

$$5 + 5 + 5 + 5$$

$$4 \times 5$$

$$8 + 8 + 8$$

$$3 \times 8$$

$$7 + 7 + 7 + 7$$

$$4 \times 7$$

$$4 + 4 + 4 + 4 + 4$$

$$5 \times 4$$

$$9 + 9$$

$$2 \times 9$$



Pumpkin Seed Multiplication


