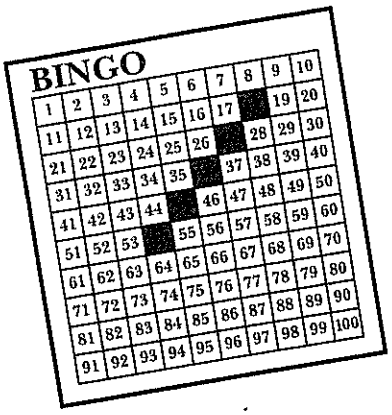
Multiple Bingo and Division Bingo



In these two versions of the classic game, the "Bingo" grid is either the 100 chart (for Multiple Bingo) or the multiplication table through 12 (for Division Bingo). Players select number cards from special decks and find either a multiple or a factor of that number on their Bingo grid, then color in that square. The goal is to color in five consecutive numbers, horizontally, vertically, or diagonally.

Materials

Grid for Multiple Bingo (p. 125)

Multiple Bingo number pool (p. 126), set of 20 cards for each playing group

Grid for Division Bingo (p. 127) for each player

Division Bingo number pool (p. 128), set of 20 cards for each playing group

Crayon or marker for each player

Calculators for players to share

Mathematical Emphasis

These Bingo games offer practice with finding multiples and factors of numbers. Whether players skip count, use multiplication pairs, or divide to find suitable numbers on their grid, they are reasoning numerically about the relationships among factors and their multiples. The focus is on

- relating factors to their multiples
- becoming familiar with multiplication patterns
- developing number sense about multiplication and division relationships

Number of Players

Groups of two to four

Procedure

Step 1: Gather the materials. Each player needs a "Bingo" grid (the 100 chart for playing Multiple Bingo, or the multiplication table for playing Division Bingo) and a crayon or marker. The cards for the number pool (16 number cards and 4 wild cards) are stacked face down.

Step 2: The caller turns up the top card in the number pool. Players take turns being the caller. Any time the caller turns up a wild card, he or she can name any number as the factor or the number to be divided.

Step 3: Players decide individually which number to color on their Bingo grid. For Multiple Bingo, players may color in any number that is a multiple of the number (factor) called. They also write the factor in the square. For example, if the caller turns up a 5, players could color any one of the numbers 5, 10, 15, 20, 25, and so forth. In the corner of the square selected, the player writes the factor 5.

For Division Bingo, the procedure is the same, except that players use the multiplication table for a Bingo grid and color in a *factor* of the number that is turned up. As before, the player writes the number called in the selected square. For

example, if the caller turns up 100, players could color in any one of the numbers 1, 2, 4, 5, 10, 20, 25, 50, or 100, and write 100 in the corner of the chosen square.

Step 4: Repeat the process until someone has colored five in a row. The game continues until a player colors in five numbers in a row. The remaining players can choose to continue until they also get five in a row.

Special Notes

Game Strategies A player who gets to name a wild card number should strategically choose a number that helps his or her own game without helping the other players. For example, in Multiple Bingo, it is often useful to pick a prime number. Thus, while the player might pick 23 to fill in a gap between other multiples already colored on his or her grid, other players would be limited to the choice of 23, 46, 69, or 92.

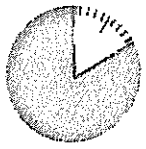
Whole-Class Game While the procedure describes a small-group game, either version of Bingo could played as a whole class. One caller is named to turn up the numbers for the group. If a wild card is turned up, the caller names a number for everyone to use. You might continue play until you have one winner or until every player has covered five in a row. When playing as a whole group, students who are new to the game might collaborate with another student.

Using Materials for Reference Encourage students to use calculators as a reference tool for checking multiples and factors.

Reusing the Bingo Grids To reuse the Bingo grids from one game to the next, students might use chips or small cubes to cover the squares instead of coloring them. Alternatively, some teachers prepare laminated grids that can be wiped off after each game, with players using either a crayon or an overhead marker.

Limiting the Number Pool

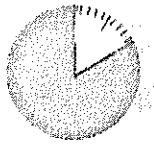
For an easier version of Multiple Bingo, use only the top two rows of number cards plus a few wild cards. This means that students will be finding multiples for only 2, 3, 4, and 5. If your students have 100 charts from their class work that highlight these multiples, they might use those charts for reference while they play the game. As students become familiar with additional multiples, add cards to the number pool accordingly. Similarly, an easier version of Division Bingo would use only 100, 180, 200, 60, 98, 32, 72, and 150, plus wild cards, in the number pool.



Multiple Bingo

Grid for Multiple Bingo

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Multiple Bingo

Number Pool for Multiple Bingo

2	2	2	3
3	4	4	5
6	7	8	9
12	15	16	20
Wild Card	Wild Card	Wild Card	Wild Card