## FAMILY MATH FUN Handouts and Directions



## HOW TO PLAY Factor Bingo

Note to Families: This is one of several number games we play in class. Use this sheet to review the directions with your child. When you play the game together at home, be sure to give your child time to think about and relate facts to common factors. Please keep both the game directions and the deck of cards in a safe place at home for continued use.

Materials: Factor Bingo Game Mat
Deck of Cards (remove the face cards, Aces count as 1's)
Counters (buttons, beans, pennies, etc.)
Sheet of paper
Players: 2
Object: Finding multiples of a target factor

## How to Play

1. Shuffle the cards. Place the deck number side down on the table.
2. Turn over and announce the top card. This is the Target Factor.
3. Each player places a counter on one square containing a multiple of the target factor.
4. The first player to get 5 counters in a row, column, or diagonal calls out, "Bingo!" and wins the game. A player who places 12 counters anywhere on the game mat may also call out "Bingo!" and win the game.
5. Play should continue until there is a winner. Reshuffle the deck as needed.

## Variations:

- Create a game mat with fewer squares (like a $4 \times 4$ grid of 16 squares).
- Fill in the game mat with a smaller range of numbers
(for example, numbers between 2 and 50 ).


## Factor Bingo Game Mat

Fill in the squares on the game mat grid with any 25 numbers from 2-90. Write one number on each square on the grid. Every square must contain a different number. Be careful to mix the numbers so they are not in order on the grid.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |


|  | 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 |

## HOW TO PLAY The Factor Game

Note to Families: This is one of several number games we play in class. Use this sheet to review the directions with your child. When you play the game together at home, be sure to give your child time to think about and relate factors to products. Please keep both the game directions and the deck of cards in a safe place at home for continued use.

Materials: Deck of Cards (remove the face cards, Aces count as 1's)
Blank paper and pencil for each player
Optional - graph paper or color tiles to build arrays
Players: 2
Object: Finding factors of a product

## How to Play

1. Shuffle the cards. Place the deck number side down on the table.
2. Player one draws two cards from the deck and gives the product of the two cards. (Example - 3 and 4 are drawn, so the product is 12)
3. That player must then give all the factors for the named product. (Example - 12 is the product, so the factors are $1,12,2,6,3,4$ ) The player will receive a point for every correct factor named for the product. (Six points would be awarded for the product of 12) The score is recorded for player one and then play passes to the next player.
4. Player two draws two cards from the deck, states the product and then names the factors for that product. Points are awarded and play continues.
5. After 15 minutes has passed, the player with the most number of points is the winner of the Factor Game!

