## FAMILY MATH FUN Handouts and Directions



## How to Play Product Pile-Up

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 the numbers on the cards. Please keep both the game directions and the number cards in a safe place at home for continued use.

Materials: Deck of Cards (Take out all face cards and jokers. Aces will be worth 0 or 1 in this game.)

Players: 2-3
Object: To play all of your cards and have none left.

## How to Play

1. Shuffle cards and deal 12 cards to each player. Place the remaining cards number-side down on the table between the players.
2. The player to the left of the dealer begins. This player selects two of their cards, places them number-side up on the table, and determines the product that can be made using both cards. Example: If player 1 chooses to use a 5 and a 3, the product would be 15 (5 $x 3=15$ ).
3. The next player selects and plays 2 cards making a product greater than the product jus $\dagger$ played by the previous player. If this player is not able to create a greater product, that player must draw 2 cards from the deck. These cards are added to the player's hand. If the player is now able to make a greater product, those 2 cards are played.
4. If after drawing 2 cards and that player still cannot create a greater product, the player has to pass. A new round with any 2 cards can then be started.
5. The winner is the first player to run out of cards or the player with the fewest cards when there are no more cards to draw.

## Variations:

Try some of these different ways to play the game.

- Switch the rules of the game by having players make a product less than the last product played.
- Allow 3 cards to be played so that the the player multiplies twice $(2 \times 3 \times 4=24)$.
- Use the face cards and use numbers 11,12 , and 13 or make the face cards other values like 20,50 , and 100.

