

Below is an excerpt from an article from the magazine Teaching Pre K- 8.

Departments: Integrating Math in Your Classroom:

Math is In the Cards

By Michael Naylor

Classic and new activities that use a deck of playing cards to teach math concepts – "52 Pick-up," anyone?

Make 10 –

Remove the face cards from a deck. Deal 12 cards face up. Players take turns finding and removing combinations of cards that add up to 10. When both the players agree that no more tens are possible, more cards are dealt. This game helps students recognize parts of 10, an important step in learning to add and subtract base 10 numbers.

Missing addend "mind reading" (Grades 1-3)

In this game for three players, one student is the leader and the other two are the players. The two players each draw a card and, without looking at it, hold it up to their foreheads so that everyone else can see it. The leader announces the sum of the two cards. Each player must figure out which card is on his or her own forehead. When both players have figured out their cards, a new leader is chosen and the game continues. Try playing this game with four or five players for a challenge!

Missing factor "mind reading" (Grades 3-6)

This is identical to the previous game, except the leader announces the product of the cards. A nice feature is that all players get practice with products and factors in every round.

Build a number (Grades 4-8) * this is similar to the 24 game we play in class!

When playing this game with younger children, remove the face cards; with older kids, make Jacks worth 11, Queens 12 and Kings 13. If your deck has Jokers, make them worth 0.

Select a target number from 1-30. Five cards are then flipped face up, and the object is for students to make a number sentence using all five cards with any operations to reach the target number.

For example, suppose the target number is 20 and the cards in play are 5, 5, 6, 2, and Ace (worth 1). One winning combination is: $5 \times 2 + 5 + 6 - 1 = 20$. Another is $(6 \times 5) - (2 \times 5 \times 1)$. Also, $(6 \div 2) \times 5 + (5 \times 1)$ works, as do many more.



The first player to find a winning combination keeps the cards and chooses the next target number. If no combination is found in about a minute, flip over another card and try to make a combination using six cards.

To keep the game fair for players of different abilities, introduce the rule that if a player hasn't made a combination in three rounds, he or she may make combinations using four of the five cards; other players must use five.

Multiplication zone (Grades 4-8)

This game for two to four players encourages the use of multiplication facts and estimation. Jacks are worth 11, Queens 12 and Kings 0 or 13. Each player is dealt 10 cards.

A card from the remaining stack is flipped face up. Its value is multiplied by 10, and players try to find a pair of cards whose product is in that "decade." For example, if the flipped card is a six, then the zone is any number in the sixties (60-69), so a winning pair would be 9 and 7 (product 63) or 12 and 5 (product 60), etc.

Any player who can make a pair removes those cards from his or her hand. Play continues until one player's hand is empty.

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