

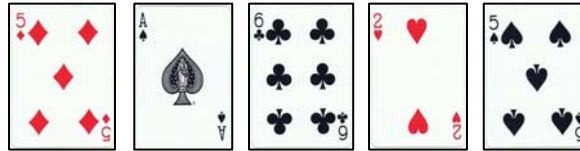
Hit The Target (Grades 4 - 8)

Players: Groups of two to five players

Materials: Deck of cards, Ace worth 1 or 11, Jack worth 12, Queen worth 13, King worth 14, scratch paper

Skill: Multiplication, addition, subtraction, division, order of operations, and mathematical reasoning

How to Play: Each group of 2 - 5 students selects a target number from 1-30. One of the players will turn five cards from the deck 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).

$$\begin{array}{c} 5 \\ \diamond \end{array} \times \begin{array}{c} 2 \\ \heartsuit \end{array} + \begin{array}{c} 5 \\ \spadesuit \end{array} + \begin{array}{c} 6 \\ \clubsuit \end{array} - \begin{array}{c} A \\ \spadesuit \end{array} = 20$$

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 until they make a winning combination; other players must use five.