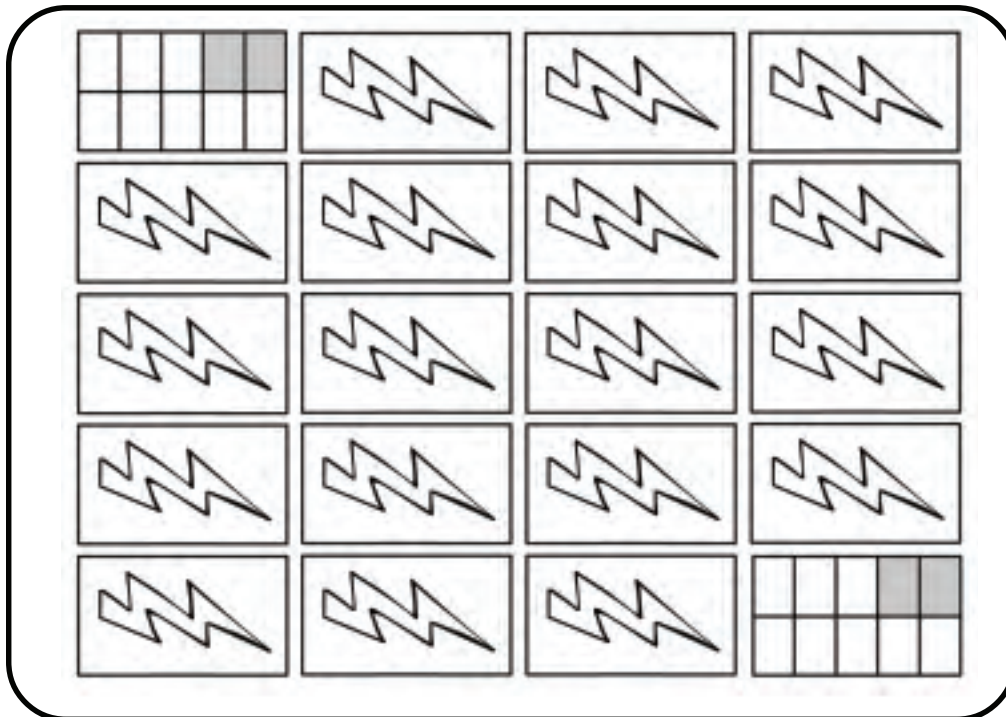


CONCENTRATION

Materials:

One *Deck of Power of Ten* playing cards (a full deck features twenty cards with two cards of each number denomination).

With younger students you may wish to use half a deck, or ten cards. Begin by using all the cards to number five and then add six, seven, eight, etc. at your discretion. Student ability and experience with the game will dictate the number of cards you choose to employ.



Number of Players:

The game is played with two, three or four players.

Object of the Game and Scoring:

The object of the game is to obtain as many pairs (two cards showing the same number) as possible. When a player finds a pair, she takes another turn. The player with the most cards at the end of the game wins.

CONCENTRATION

Method of Play:

1. Shuffle the cards and spread them face down on a table or on the floor.

Arrange the cards in equal rows

(two rows of ten or four rows of five). This matrix may also be featured during calendar time, and within other contexts that focus upon the related multiplication and division operations:

- 2×10 ; $20 \div 10$
- 4×5 ; $20 \div 5$

2. Player #1 flips over two cards, one at a time, while pronouncing the value of each. Where the two cards are the same, the player retains both cards and continues to take another turn. Where the two cards upturned are dissimilar, the cards are then returned face down to the spread of cards.
3. Player #2 then takes his turn and flips over two cards, stating the value of each.
4. The game continues until all cards have been claimed.
5. The winner is the person who retains the most cards.

Adaptations and Extensions of Concentration:

1. Once a player has turned over one card, he may then ask other players if the matching (or equal-value) card that he seeks has already been shown.

If the answer is yes, then directions for locating the matching card must then be provided by other players, using directive coordinates such as “row four, over three”, or “column two, up one”. This activity introduces the concept of coordinates in geometry, and encourages students to think spatially. The player guided in his card search must interpret information provided from the point of view of those directing his movements. Players are allowed this choice once per game. Where a student provides incorrect or misleading directions, he forfeits a turn. The winner is the person with the greatest sum when all his card values have been totaled.

2. **Friendly Concentration** is played as follows:
Remove the two ten cards, leaving 18 cards. Arrange the cards in a 3×6 or 2×9 matrix. **Friendly Concentration** is played by seeking two cards with values that equal ten.