NUMBERS FACTORY Mental arithmetic for any number of players Contents:

6 collecting boards, with numbers up to 12 on one side and higher numbers on the other.

72 arithmetic cards with objects on one side and sums on the other. Sums with answers up to 12 are on a green ground. Sums with answers greater than 12 are on a red ground.

Preparation:

Each player (or team) receives a collecting board. The cards are placed in the middle between players.

Counting Lotto:

boards 1 – 12 side up, cards sum side up.

First player: turn over a card and call out the number. If you have a matching number on your board, cover it. If not, put the card back in the middle. It is then the next player's turn. The first player to complete a board is the winner.

Numbers Factory 1:

boards 1 - 12 side up, cards picture side up (use just the cards with the sums on a green ground.)

First player: turn over a card and call out the answer to the sum. If you have a matching number on your board, cover it. If not, another player may claim the card. If no one has a matching number, put the card back in the middle. It is the next player's turn. The first player to complete a board is the winner.

Numbers Factory 2:

boards 12+ side up, cards picture side up (use just the cards with the sums on a red ground).
As above.

Finding Factors 1:

boards 1 - 12 side up, cards sum side up.

First player: turn over a card and call out the number. If it divides into a number on your board or if a number on your board divides into it, cover it. (You may have a choice.) If not, put the card back in the middle. It is then the next player's turn. The first player to complete a board is the winner.

Finding Factors 2:

boards 12+ side up, cards sum side up. As above.

If the number divides into a number on your board, cover it.

Finding Factors 3:

boards 12+ side up, cards picture side up. Turn over a card and call out the answer to the sum.

If it divides into a number on your board or if a number on your board divides into it, cover it.

Finding Factors Solo games:

Use one collecting board. When a number is covered, the number on top replaces it and can be covered again. Keep playing until you have used all the cards.

Multiplication:

boards 12+ side up, cards sum side up.

First player: turn over two cards and multiply the numbers. If you have the answer on your board, place both cards on top. If not, keep the cards beside your board. You may be able to use one or both with a card or cards you pick up on a later turn. Play continues in turn until one player completes a board. If all the cards from the middle have been used, on your turn you may select one or two unused cards from one other player. The number chosen must enable you to cover a number or numbers on this turn, or to do so on your next turn combined with the cards you take from another player. You cannot take cards simply in order to impede another player from winning. If there is still no winner, a 1 card may be added to another number card. (e.g $[6+1] \times 2=14$)

Free for all:

Instead of players taking turns, games can be played on a freefor-all basis.