# Mental <br> ® <br> NUMM監O <br> Maths 

Numero ${ }^{\circledR}$ Game Rules Version 1.0

## Introduction

Numero ${ }^{\circledR}$ is a game for all ages. Simply set the level of difficulty to match the ability of the users. This is done by deciding which cards are included in the pack for a particular game.

To play Numero ${ }^{\circledR}$ well, all players must start at the early stage and progress to more challenging levels. As a learning game, it is best played between two people, which provides the optimum playing conditions to challenge minds and improve number skills.

$\times 2$
WILD
3 Point-Scoring Cards: To be used as reference cards when players reach the scoring level of challenge.

White Dot: Cards have a small white dot on the Numero ${ }^{\circledR}$ side of the card. The dot has been placed on the cards so that individual packs can be numbered to avoid situations where different packs become mixed.

## Game Setup

## To begin to play Numero ${ }^{\circledR}$, follow these simple steps:

- Before commencing the game, select only the Number Cards from the pack (all cards 1-15). These are the only cards you use at this stage.
- Ignore the colours and points on some cards.
- For young children, using only Number Cards 1-10 is a successful strategy.


## Starting the Game

1. First, deal five cards to each player (ideally played with only two players).
2. Place two cards face up in the centre of the table.

Note: Although you start with two cards in the centre, the number of cards in the centre will vary during play. At times there will be fewer (sometimes no cards at all) and at other times, more than two.
3. If you must have three people play (two players is ideal), then you will play in a clockwise direction and three cards will be turned face up in the centre to start the game.
4. Place the remainder of the deck in the centre of the table (face down).


You are now ready to play Numero ${ }^{\circledR}$, with the non-dealer having the first turn. Players take turns. Each player plays a Number Card from his/her hand, to the centre and must either take, build or discard.

## A Take

A take is when a single Number Card from your hand is matched to a card, or combination of cards, equalling the same number in the centre. The cards in the take and the matching card from the hand are then placed face down on the table near the player. This is your 'winning pile' and these cards are counted at the end of the game to determine the winner.

The hand is restored to five cards from the deck. It is important to always restore your hand to five cards at the completion of each turn.


Play the 5 from the hand to win the 5 from the centre. However, a better alternative is to join the 5 and 3 in the centre to make 8 . Then take with the 8 from the hand to win both cards (the 5 and 3 from the centre).

Note: Although you may use only one Number Card from your hand, you may win any cards from the centre that equal, or join to equal, a single card in your hand.

## GOLDEN RULE NO.

Each turn, play only one Number Card from your hand - a TAKE, a BUILD, or a DISCARD


Play the 10 from the hand to take the 10 from the centre. However, a better alternative is to join the 6 and 4 to make 10 . Then play the 10 from the hand to take both sets of 10 (the 10 and the 6 and 4 from the centre). This is referred to as a multiple take.

## A Build

It is not always possible to take. If you cannot take, you try to build.
A build is when a card from the hand is added to a single card, or combination of cards, from the centre. This creates a new number, ready for a later take.


Not being able to match the 9 for a take, you look to build. Play the 1 from the hand, adding it to the 9 , for a build of 10 (saying out loud, ' $9+1=10$ ').

The build of 10 is valid, as you have the answer to the build in your hand in a single card. (It is recommended that players show the answer card to their opponent to prove the build is valid.)

Note: As you can play only one Number Card from your hand each turn, a build finishes your turn. You cannot take until your next turn. Restore your hand to five from the pack.

Any player may take a build if it is his/her turn. A build may be added to by any player to make another build, provided they have the answer to the new build in a single card.

A build can never be broken up or separated.

GOLDEN RULE NO.
When you BUILD, you MUST have the answer in your hand in a SINGLE card.


Not being able to match the 5 , the 3 or a join of 5 and 3 (8) for a take, you look to build. Play the 4 from the hand, adding it to the 5 , for a build of 9 (saying out loud, '5 + 4 = 9');

OR, play the 9 from the hand, adding it to the 3 , for a build of 12 (saying out loud, ' $9+3=12$ ');

OR better still, join the 5 and 3 from the centre to equal 8. Play 4 from the hand to the 8 for a build of 12 (saying out loud ' $5+3=8,8+4=12$ ').

## A Discard

If you cannot take or build, you must discard. A discard is placed as a single card in the centre, not on top of other cards (into space). Any discard remains in play. Always restore your hand to five cards after every turn. This is the only way the cards in the centre are replenished (to be used in later takes and builds). You may discard any card from your hand. However, where possible, plan ahead and discard a card you could use on your next turn.


One of the first things to look for when discarding is a number sentence. With your 4 and 5 adding to 9 , you would discard the 4 or the 5 (usually the higher of the two numbers you wish to build).

If it is still there for your next turn, you could add the other number to it for a build of 9 , which can be taken in the following turn.


The second option for discarding is to look for a matching pair. If you have a pair, you would discard one of them. If it is still there for your next turn, you could do a matching take with the other card of the same number.

If none of the above opportunities present themselves, or if you are in doubt, it is suggested you discard a low card.

## End of Game

When the deck is finished, keep playing until one player is out of cards. The other player is then given a final chance to play, but only if able to take. The game is then over.

Any cards left in the centre are added to the 'winning pile' of the player who did the last take of the game. Any cards left in the final player's hands, means that number of cards are subtracted from that person's 'winning pile'. These left-over cards are not added to anyone's piles.

All players' 'winning piles' are then counted and the player with the most cards is the winner.

## Stop! Stop! Stop!

You now know how to play Numero ${ }^{\circledR}$. It is best to develop a good understanding of Numero ${ }^{\circledR}$ at this level, before moving to more challenging stages.

When you do proceed to the next level, do so in gradual steps. Learn each level before moving to the next.

## Wild Cards

## Introducing Wild Cards (starting with subtraction)

The introduction of Wild Cards greatly increases the possible moves and the level of challenge in Numero ${ }^{\circledR}$.


The -2 Wild Card can be played onto the 10 , to make 8. Then, having an extra turn after playing your Wild Card, you could play your 8 to take;

OR, an even better move, after playing the -2 onto 10 to equal 8 , is to play the -4 Wild Card onto the 5 to make 1, leaving you with still another turn.

You then join the $8(10-2)$ and the $1(5-4)$ to make 9 and take with your 9, winning a total of 5 cards. Notice that you still played only one Number Card from your hand. (Golden Rule No.1)
(Remember: Your turn ends as soon as you have played a Number Card from your hand!)

At the end of this turn, you would then restore your hand to five cards, drawing from the deck. If you cannot take, you might use your Wild Card in a build.

A WILD CARD, when played from your hand, gives an extra turn.


You could play the -5 Wild Card onto the 8 to make 3. Then, with your extra turn, you could add the 10 for a build of 13. (Golden Rule No.2)

However, playing a Number Card would end your turn, and you would have to wait and hope to take in your next turn.

## Discarding Wild Cards

You may discard a Wild Card; however, your turn is not complete until you have played a Number Card from your hand. If you have five Wild Cards in your hand, discard all five cards, ending your turn. Then restore your hand to five from the deck.

To avoid this situation, should you find yourself with four Wild Cards and one number card, yet unable to take, then a suggestion is to discard one or two Wild Cards (perhaps your most difficult to use) and then complete your turn by discarding your only number card. Hopefully, you'll pick up more number cards and open your hand up a little!

## Other Wild Cards

As in the last example, a series of Wild Cards can be played from your hand as long as you play only one Number Card from your hand.

Introduce other Wild Cards such as division, multiplication, fractions etc. as you become ready for greater challenges.

A WILD CARD, when played from your hand, gives an extra turn.


Playing the -2 onto 10 makes 8 ; the $\div 4$ played changes this to 2 ; the $x 3$ played makes this 6 ; and, you then take with the 6 , all in one turn, winning five cards, but still using only one Number Card from your hand.

## Scoring

For the ultimate Numero ${ }^{\circledR}$ challenge, play the game using the points scoring system.
The winner now is the one who scores the most points, instead of who simply wins the most cards. Try scoring with Numero ${ }^{\circledR}$ after you have become a confident player. Scoring does not affect any rules of play; however, it will influence strategies used during play.

## How to Score

Scoring must be recorded progressively, spreading out the cards after each take to note their bonus points values on a score sheet.

- Each take earns 1 point. Note: A multiple take earns 1 point for each individual take in that play; e.g. a 10 played to take both a 10 and a $6+4=10$ counts as two takes and equals 2 points.
- Each card in a take earns one point; e.g. a 10 played to take both a 10 and a $6+4=10$ counts as two takes (equals 2 points) and the takes include a total of four cards (10, $10,6,4$ ) equalling 4 points, for a total of six points.

1. Each TAKE 1 point
2. Each card in a TAKE/s
1 point
3. WILD CARDS, 1 s and 15 s - as printed
4. A TAKE of 5 cards 2 points
5. A TAKE of 6 or more cards - 5 points
6. A TAKE using 3 of 5 points $(+,-, x, \div)$
7. A TAKE using all 4 of 10 Points ( $+,-, \mathrm{x}, \div$ )
8. A TAKE (5 cards or more) - 5 points with all 4 'colours'
9. A TAKE (5 cards or more) - 5 points with only 1 'colour'
10. 'CLEARING THE DECK' - 5 points
11. MOST cards held at the - 10 points end of the game

## Bonus Points

Bonuses are the means of earning the most points. Bonus points for the number and colour of cards (items 4, 5, 8 and 9 on the Checklist) apply to individual takes only, and not to all cards won in one turn (if the turn included multiple takes).

The same applies to bonus points for the number of operations (items 6 and 7). For this purpose, fraction cards with a numerator (top number) of 1 count as division only, while fraction cards with a higher numerator count as division and multiplication.

## Roots

If playing with powers and roots $\left(N^{2}, N^{3} \sqrt{ } N, \sqrt{3} / N\right)$ at scoring level, $N^{2}$ and $N^{3}$ count as multiplication, while $\sqrt{ } N$ and ${ }^{3} \sqrt{ } N$ count as division when calculating the number of operations used.

## Challenges

When at the scoring level of Numero ${ }^{\circledR}$ (where tactics become more important), players may be tempted to break Golden Rule No. 2 and build without holding the answer. If an opponent suspects this has happened and challenges the build ('Show me that 10...'), and the required card cannot be shown, the offender is penalised 20 points and the card used in the build is placed in the centre as a discard. If a player is challenged and can show the card concerned, the challenger is penalised 10 points. Such a challenge must be made before the challenger's second turn, after the move being challenged.

## End of Game

When one player is out of cards, the game is over, unless the other player can do a take with their final turn.

- Any cards remaining in that player's hand are subtracted from his/her score—both the number of cards and the bonus value of any cards.
- Any cards remaining in the centre go to the last player to record a take.


## Numero ${ }^{\circledR}$ Solitaire

Numero ${ }^{\circledR}$ Solitaire is an interesting and challenging version of Numero ${ }^{\circledR}$ for when you are on your own. It provides the same enjoyment and challenge as the normal game and also means you can practise working out the infinite variety of possible number combinations.

## The Basic Rules

1. Using whichever selection of cards you wish, deal five cards into the centre and five cards for your hand.
2. Make the best possible take that you can (or multiple takes) with one Number Card from your hand.
3. From the deck, restore both the centre and your hand respectively to five cards.
4. Repeat the procedure as long as you are able to take.

Note: No builds for future takes are allowed and no discards. Simply perform the best take you can.
5. When you can no longer take, the game is over and you then either count the cards won or note the points scored, depending on the level of game played.
6. Remember that at all levels of play, you play only one Number Card from your hand each turn (your 'taking' card) but may use any or all Wild Cards from your hand and any cards (Wild or Number) from the centre.
7. The highest level of both Numero ${ }^{\circledR}$ and Numero ${ }^{\circledR}$ Solitaire is when you play to score points, instead of simply winning cards. If you wish to move to this level, simply check the Numero ${ }^{\circledR}$ Rules and use the Checklist Cards to help you remember the different ways of scoring. Then, with every take that you do, simply spread out the cards in the take to count them, check their point values, colours, operations etc. before placing them in your 'winning pile'. The only additions to the normal Numero ${ }^{\circledR}$ point scoring when playing Numero ${ }^{\circledR}$ Solitaire are:

- If you use (deal) all the cards from the deck, score an extra 10 points and if you achieve the perfect ending by being able to take with every card in your hand and 'clear the deck', score an extra 25 points.
- Any cards showing point values left in your hand when the game ends means those points are subtracted from your score.

