The background of the entire page is a light cream color, overlaid with a dense, scattered pattern of various numbers and mathematical symbols. These include integers (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15), decimal numbers (e.g., 0.1, 2.5), fractions (e.g., 1/2, 5/6), and mathematical operators (e.g., +, -, x, %, ÷, =). The symbols are rendered in a 3D, blocky style with a variety of colors including red, blue, green, yellow, and orange.

# NUMERO<sup>®</sup>

Mental Maths Game

**Numero<sup>®</sup> Game Rules**

Version 1.0

# Introduction

**Numero®** 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®** 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.

## The Numero® Pack includes:

**Number Cards:** Four sets of Number Cards (1–15) – green, orange, blue and red. When learning to play **Numero®**, use only these cards (and only numbers 1–10 with young children).

**Wild Cards:** Are added to increase the level of challenge of play as the ability of players increases – 4 subtraction, 4 multiplication, 4 division, 13 fraction/decimal/percentage; square root, cube root, squared and cubed cards (for players looking for a further challenge).

**4 Blank Cards:** To be used as replacements if cards are lost.

**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®** 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.



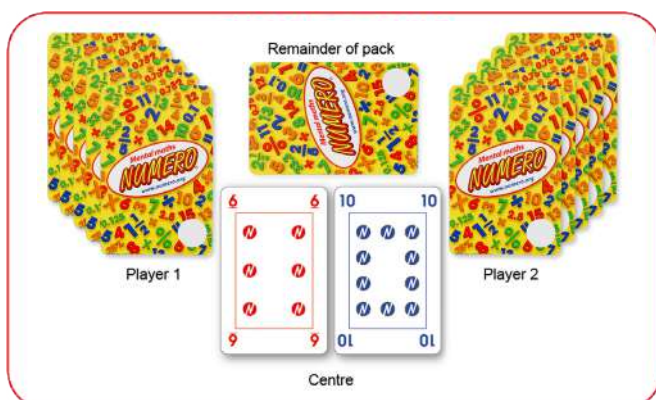
# Game Setup

To begin to play Numero®, 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).

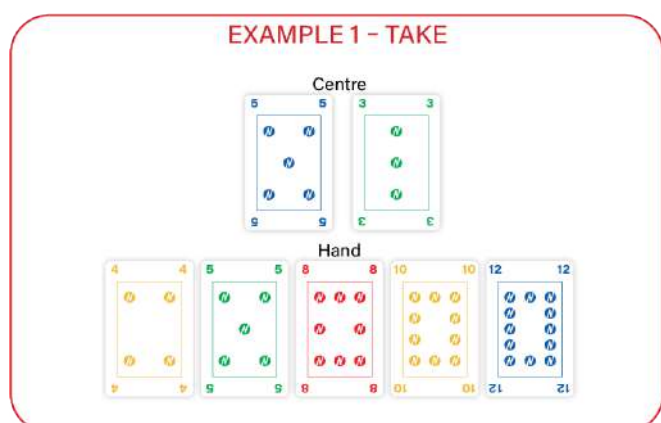


You are now ready to play **Numero®**, with the non-dealer having the first turn. Players take turns. Each player plays a Number Card from his/her hand, to the centre and must either **take**, **build** or **discard**.

## 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.

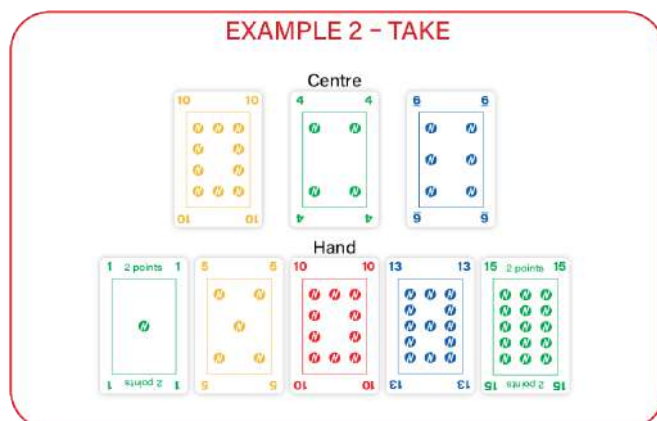


Play the **5** from the hand to win the **5** from the centre. However, a better alternative is to **join** the **5** and **3** in the centre to make **8**. Then **take** with the **8** from the hand to win both cards (the **5** and **3** from the centre).

**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. 1**

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

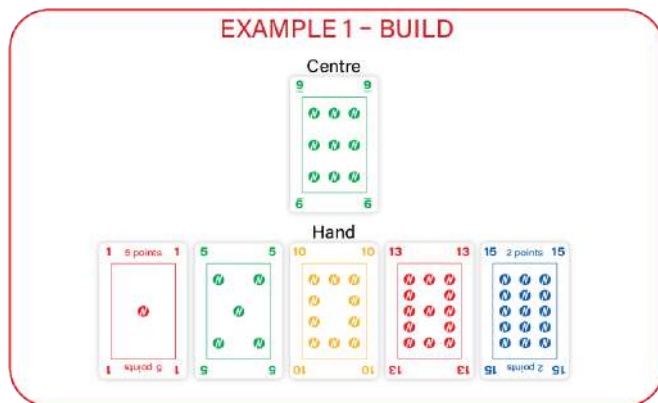


Play the **10** from the hand to **take** the **10** from the centre. However, a better alternative is to **join** the **6** and **4** to make **10**. Then play the **10** from the hand to **take** both sets of **10** (the **10** and the **6** and **4** from the centre). This is referred to as a **multiple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

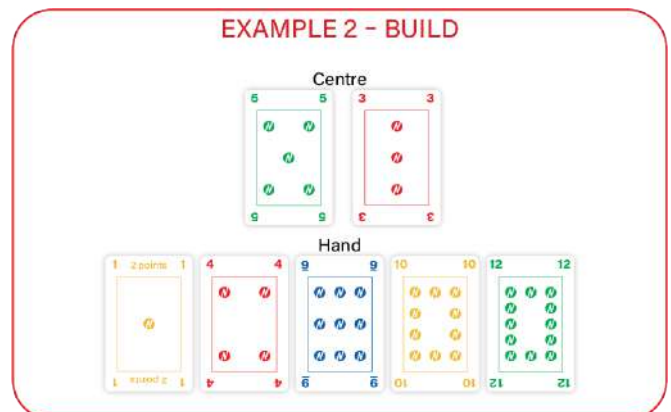
**Note:** As you can play only one Number Card from your hand each turn, a **build** finishes your turn. You cannot **take** until your next turn. **Restore your hand to five from the pack.**

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. 2

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, ' $5 + 4 = 9$ ');

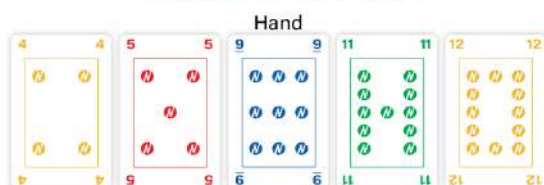
**OR**, play the **9** from the hand, adding it to the **3**, for a **build** of **12** (saying out loud, ' $9 + 3 = 12$ ');

**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.

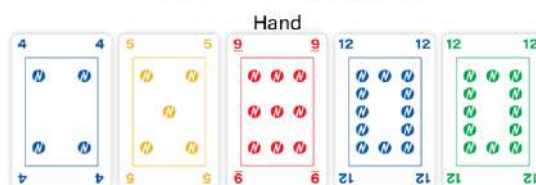
EXAMPLE 1 - DISCARD



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.

EXAMPLE 2 - DISCARD



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**®. It is best to develop a good understanding of **Numero**® 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.

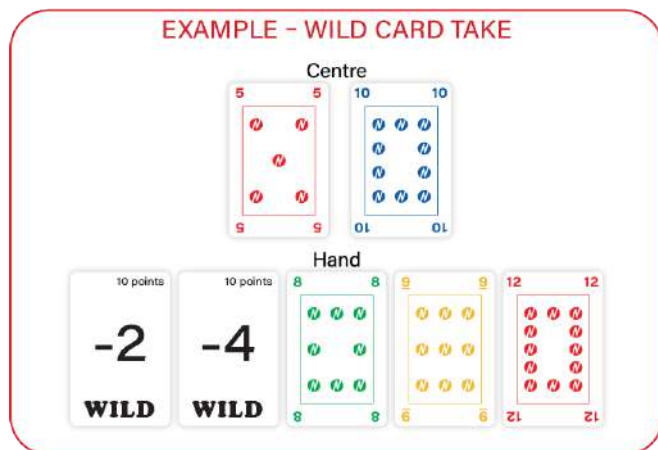




# Wild Cards

## Introducing Wild Cards (starting with subtraction)

The introduction of Wild Cards greatly increases the possible moves and the level of challenge in **Numero®**.



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.

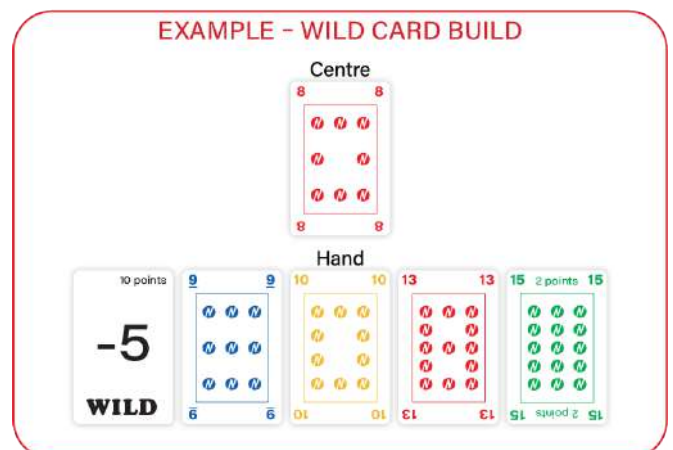
You then **join** the **8** ( $10 - 2$ ) and the **1** ( $5 - 4$ ) to make **9** and **take** with your **9**, winning a total of 5 cards. Notice that you still played only one Number Card from your hand. (Golden Rule No.1)

(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**.

## GOLDEN RULE NO. 3

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

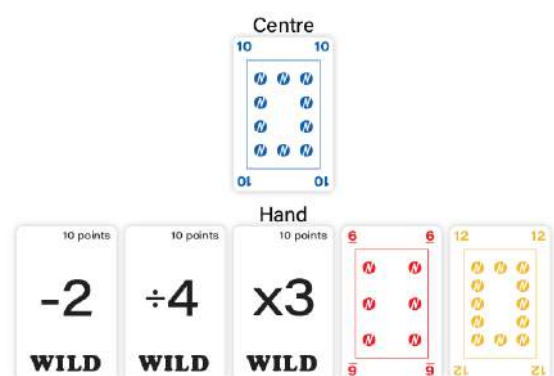
As in the last example, a series of Wild Cards can be played from your hand as long as you play only one Number Card from your hand.

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

### GOLDEN RULE NO. 3

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

#### EXAMPLE - OTHER WILD CARDS



Playing the **-2** onto **10** makes **8**; the **÷4** played changes this to **2**; the **x3** 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®** 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®** 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.

## 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.

- Each TAKE ——— 1 point
- Each card in a TAKE/s ——— 1 point
- WILD CARDS, 1s and 15s — as printed
- A TAKE of 5 cards ——— 2 points
- A TAKE of 6 or more cards — 5 points
- A TAKE using 3 of ——— 5 points  
(+, -, x, ÷)
- A TAKE using all 4 of ——— 10 Points  
(+, -, x, ÷)
- A TAKE (5 cards or more) — 5 points  
with all 4 'colours'
- A TAKE (5 cards or more) — 5 points  
with only 1 'colour'
- 'CLEARING THE CENTRE' — 5 points
- MOST cards held at the — 10 points  
end of the game

## Roots

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

## Challenges

When at the scoring level of **Numero®** (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® Solitaire

**Numero® Solitaire** is an interesting and challenging version of **Numero®** 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®** and **Numero® 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®** 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®** point scoring when playing **Numero® 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.