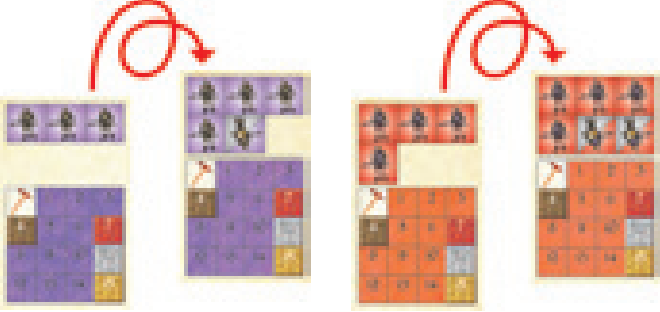# LEONARDO DA VINCI

A Strategy game for 2 to 5 players

The greatest Renaissance inventors have gathered to compete for fame and fortune in Florence, Italy. The Lord of the city has promised to pay a reward for each completed invention. In the end, the player who collects the most Florins will be crowned the victor by Leonardo da Vinci!

1. Contents

In five colors: 5 masters (1 of each color)

10 work counters

45 apprentices (9 of each color))

10 laboratories: five small (3/5 spaces) and five large (4/6 spaces)

the board, showing the city

15 mechanical men

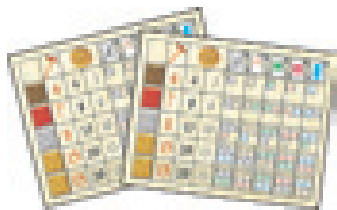60 Components cards: 12 × Iron, 12 × Wood, 12 × Rope, 12 × Brick, 12 × Glass

60 Florin cards: 25 × "1", 10 × "5", 10 × "10", 10 × "20", plus 5 × "0"
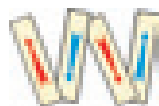
25 inventions

1 money marker

1 turn marker

2 summary tables

4 invention markers (arrows)

Leonardo, with base

1 Lord of the City with base

- These rules.

2. Goal of the game

Who among you will be the most ingenious Renaissance inventor?
Choose the inventions you want to create, gather the right components from the shops in town, employ the most trusted of your apprentices in your laboratories and... race to finish before someone else does!
The more complex the invention, the more the Florins you get when you complete it. At the end of the game, Leonardo da Vinci will crown the inventor with the most Florins as the winner!

3. Equipments and Set-up for Beginners

Note: Experienced players should use the "Set-up for Experts" at the end of the rules.

The game lasts 9 turns: 7 normal turns plus 2 "pure research" turns.
The owner of the game chooses a starting player, or you can choose at random.

The illustration shows the starting set-up for beginners. Each player takes the starting pieces shown. The starting player takes the pieces in set "A," the second player takes set "B," etc. If there are less than five players, ignore the unused sets (those masters, apprentices, laboratories are returned to the box). If there are only **three players**, each player returns to the box 1 apprentice. If there are only **two** playing, each player returns to the box 2 apprentices.

a)   b)   c)   d)   e)

1 = master
2 = apprentices
1 + 2 = workers

3 = small laboratory
    (3 spaces side)
4 = small laboratory (5 spaces side)
5 = mechanical men
6 = large laboratory (4 spaces side)
7 = large laboratory (6 spaces side)
8 = work counters

9 = Florins   (a)-b)-c): 0 1 1 1; d): 0 1 1 1 5 5; e): 0 1 1 1 5)
10 = components
11 = Leonardo

The rest of the pieces are placed on the board as shown:

1 = turn marker
2 = B. Workshop
3 = large laboratory
    (4 spaces side)
4 = mechanical men
    (3 per each player)
5 = Lord of the City
6 = A. Council
7 = 1 Florin
8 = C. Academy
9 = apprentices

10 = bank
11 = Florins (4 types)

12 = the five shops
13 = iron; 14 = glass;
15 = wood; 16 = brick;
17 = rope

18 = Money marker
19 = summary table

20 = requested inventions
The Lord of the City requests certain inventions during the game. These requests are represented by face up cards on the board. Each card has a number. Place the cards numbered 1, 12, 8, 3, and 9 face up on the board. If there are **3 players**, place only 1, 12, 8, and 3 on the board. If there are **2 players**, use only 1, 12, and 8.

2

21 = invention deck

Divide the **remaining** inventions into five piles: the ones with the gold-background (a), number 21-25, the gold-background number 16-20 (a), the silver-background (b), copper background (c) and the bronze background (d).
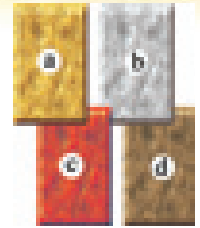
Shuffle the piles separately face down, and build the invention deck as follows:
a) The pile with 21-25 is on the bottom:
b) Remove 1 bronze, 2 copper, 3 silver, and the gold cards numbered 16-20. Shuffle these together and place them on top of part *a*.
c) Shuffle all the remaining inventions together and place them on top of part *b*.→
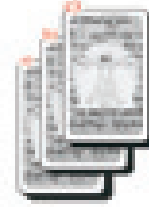
4. The inventions

During the game, you will try to complete one or more of the requested inventions.

In order to complete an invention, you will need to collect:
- a certain number of **research weeks** (4, 7, 11 or 15) *and*   →*11*
- the right components (1 = bronze bg, 2 = copper bg, 3 = silver bg or 4 = gold bg) → *2 wood + 1 glass*
When you complete an invention, you will earn some Florins:
- If you are one of the first to complete it, you earn the **higher amount (black)** of Florins: →*13*
- If you complete it later, you earn less (grey amount) Florins: →*10*
There are five types of inventions (see symbol in the upper right corner)   →
If you own an invention, it gives you a bonus to your research on inventions of the **same type** in **later turns** (see part 9: Research). If you collect a variety of invention types, you will be awarded bonus Florins at the end of the game (see part 11: End of the Game and Winning).

5. Turn Overview

The following four phases are played in order during each turn (1 through 7):

A) **Laboratory Phase**	During this phase, you declare if you are going to begin work on any inventions, or if you are going to change or cancel work at any of your labs.
B) **Assignment Phase**	Starting with the player holding Leonardo and going clockwise until all players pass, you will assign your apprentices and your master to perform various tasks around the city or perform research in a lab.
C) **Employment Phase**	• Each area in the City is resolved, in order, giving benefits to the players who have assigned workers there, beginning with the player who has the most assigned. • Afterwards, each laboratory conducts research.
D) **Research Phase**	Any labs that have completed an invention reveal their work and collect Florins from the bank in payment. If a lab is still working on an invention just completed, you must reveal those resources and announce that you are still working.

6. Phase A) Laboratory Phase

During this phase, you **secretly** decide what inventions you want to work on.

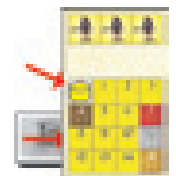Starting with the player holding Leonardo, and going clockwise, you:
- declare if you are starting any new inventions (maximum 1 per lab), and what lab is doing the work; *or*
- pass.
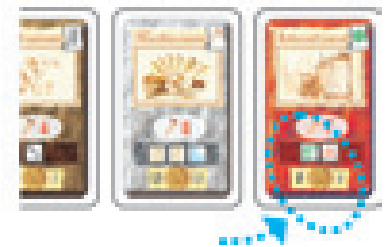
If you choose to begin a new invention:
- put the **exact** components required for that invention underneath the laboratory card; *and*
- place a work counter on the "0" (with the hammer) space of the laboratory.

This way, the other players will know how many invention(s) you are working on, but not **which** one(s)!

> **Rules of the laboratories**
>   - Each laboratory can only work on one invention at a time! In other words, you can't use the same laboratory to work on two or more inventions at the same time.
>   - Both laboratories can't work on the same invention at the same time! You can use two labs to work on two different inventions, however.
>   - The components in a laboratory must be kept under that lab in one covered pile so that other players don't see how many cards there are. The other players cannot examine your components unless you want them to. If you want, you can show the other players which components you are using.

- Laboratories don't keep secrets from their owners! You can examine the components in your labs at any time.
- The components in a laboratory cannot be changed during the work on an invention! You cannot add or remove components from a laboratory unless you cancel the work.

Important: You should always keep secret the number and type of cards you have! You **never** have to reveal how many Florins or components you have.

You can only complete each invention **once**.
You **can** start working on an invention that has not yet been requested by the Lord of the City (for example, if you know what inventions are going to come up thanks to using the Council). But, you can't complete an invention before it is requested (face up on the board)!

Particular case: canceling a work

During the Laboratory Phase, you may also cancel a work started in an earlier turn:
For each invention you want to interrupt, you:
- Remove the work counter from the laboratory (you lose any research weeks you collected);
- Take the components from under your laboratory back into your hand (you can reuse them for a different work).
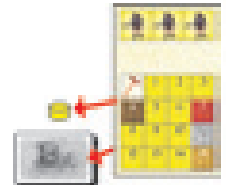
If you wish, you can begin working on a new invention in that same lab on the same turn.

Why cancel a work? You might want to use the laboratory to start working on a more valuable invention, or you might discover that you put the wrong components under the lab when you started working.

7. Phase B) Assignment Phase

The player holding Leonardo goes first during this phase, and play continues clockwise until all players pass.
On your turn, you may do **one** of the following:
• Play one or more of your apprentices at a single area; *or*
• Play your master; *or*
• Pass.
Once you pass, you must sit out for the rest of the phase. You cannot play more workers later.

Worker Rules

- Your master and apprentices can be placed in any of the areas of the city (A-H: the Council, the Workshop, the Academy, or one of the five shops), or in one of your laboratories that **is working** on an invention.
- If you choose to place more than one apprentice on a turn, you must place all the apprentices you are playing in the **same** area or laboratory. In other words, you can't place more apprentices in more than one place on a single turn.
- You may **not** add apprentices to an area of the city or laboratory where you already placed apprentices. You can only play apprentices at each area **once** during each Phase B.
- If you are the first to play workers in an area, place them next to the arrow. The next player to place there will put workers to the right of yours, and so on. If you place apprentices to an area with your master (or vice versa), you must add them to the workers **already** there.
- There is no limit to the number of workers that can share the same area of the city. But, each laboratory can only have one worker (or mechanical man) in each space on that lab card.
- You master or apprentices can be placed in any empty space of your laboratory. Your mechanical men can only be placed in the designated spaces of your laboratories (only 1 in a 5-space lab, and up to 2 in a 6-space lab).

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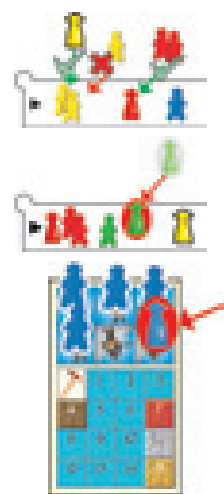
8. Phase C) Employment Phase

Once all players have finished placing their workers, it is time to resolve each area of the city and all the laboratories. First, resolve the city areas in order (A through H). Then each laboratory conducts research for the turn.

To resolve an area, you must first determine the ranking of all players who assigned workers to that area. If you have the **most apprentices** in an area, you get to act there **first**, then the player with the second most, etc. Your master is equal to **two** apprentices! If there is a tie, the player with workers closest to the arrow goes earliest. See the illustration for an example.

Here's a closer look at what happens in each area:

A. The Council

Each player in the Council may choose **only one** benefit. There is **no** cost for these benefits.
If **all** the players have played workers in the Council, then the player who ranks **last** must remove his workers. He **does not** receive any of the Council benefits.
Special rule for two players: if both players place workers in the Council, both receive one benefit.

If you are the first player to choose a benefit at the Council that turn, you also may select any player (including yourself) and give that player **Leonardo**. Then, choose your benefit and move your workers to the matching Council space:

1) You can move 1 of **your** apprentices (not your master!) to another city area. As always, if you already have some workers there, the new worker joins them. If not, place your worker to the right of any others already there;

2) Take **all** the Florins in the Council;

3) Secretly examine the top 4 inventions of the deck and put them back in any order you prefer; **or**

4) You can pay 1 Florin to the bank and take any 1 component of your choice from one shop.

Then, the second-ranked player chooses one of the **remaining** benefits, and moves his workers to that space; then it's the third ranked player's turn, and so on.
After all players have taken their choices by moving their workers, the action 1) is carried out, then the 2), the 3) and finally the 4).
Each player removes his workers from the Council and returns them to his supply. The next area is resolved (Workshop).

The other city areas: B. Worskhop, C. Academy, and the five shops (D. Blacksmith, E. Glass maker, F. Joiner, G. Kiln, H. Rope maker)

Once the Council is done, the other city areas are resolved in order.
Each area provides **four** chances for players to gain a benefit, with increasing cost (0 Florins, 2 Florins, 3 Florins, 4 Florins). The money marker is placed on the track to show the price of the next benefit, starting on the "0" space.

The order is determined normally. Then:
• The first-ranked player chooses: either take the benefit paying "0" (yes, for free!) or pass. If you pass, return your workers to your supply and leave the money marker in the same space. If you take the benefit, move the money marker one space to the right.
• Now the next ranked player chooses: either take the benefit paying the amount shown by the money marker to the bank, or pass. If you pass, take your workers back and the money marker stays. If you take the benefit, move the money marker one space to the right. Move on to the next player.
• The third-ranked player chooses, and so on.
• After the lowest-ranked player takes a benefit or passes, the process continues with the highest-ranked player that still has workers in that area (the ranking may change as workers are removed). You can acquire more than one benefit from the same area, though the costs will increase each time.
• When a player pays 4 florins for a benefit, or when all workers in that area have been removed, return the money marker to the "0" space and move on to the next area of the city.
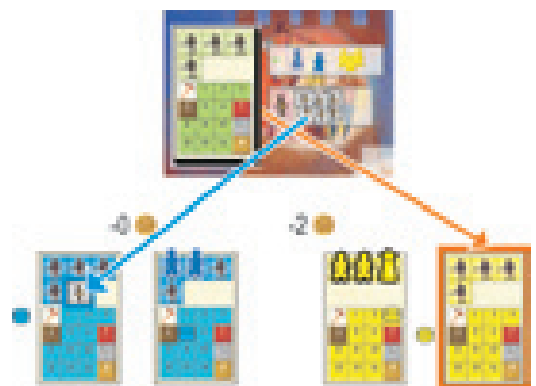
Workshop resolution. Andrew (playing blue) and Barbara (yellow) have both placed the same number of apprentices. So, we look at who is closest to the arrow. Andrew decides to place a mechanical man in one of his laboratories, for free! Barbara can't take a mechanical man (for 2 Florins), because her only laboratory

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is working on an invention. So, she takes a new laboratory (the 4 space one) for 2 Florins and places it in front of her. Andrew could spend 3 Florins to take a 4-space lab also, but he decides not to and removes his workers from the Workshop. Now Barbara has the option of upgrading her new lab to a 6-space one for 3 Florins, but she has other plans for her money so she also passes and removes her workers. Since there are no more workers in this area, the Workshop is done for the turn. Play moves on to the next area of the city.

Here are the benefits available in each area:

Workshop: You can improve your laboratories, but only when they are **not working** on an invention. You can choose from the following options:

- Upgrade your 3-space laboratory to a 5-space one.

- Build **your** 4-space laboratory, if you haven't already (maximum 1 per player).

- Upgrade your 4-space laboratory to a 6-space one.

- Place a mechanical man in one **corresponding** empty space of one of your laboratories.
Important: You cannot take a mechanical man and save it to place later!
Each player may have a maximum of three mechanical men.

Academy: You can take 1 apprentice of **your** color from the Academy and add it to your supply of workers (if any are available; you can have a maximum of 9 apprentices). From the next turn, you can place this apprentice too.
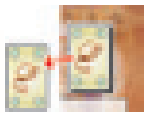
Blacksmith, Glass maker, Joiner, Kiln, and Rope maker:
You can take 1 component card from the shop, if any are available.

Laboratories

Move your work counter on the track for each laboratory that is working on an invention:
-     For each apprentice: move 1 space
-     For your master: move 2 spaces
-     For each mechanical man: move 2 spaces.
After you move your work counter, return your workers to your supply. But: your mechanical men **stay** in your laboratory where you built them until the end of the game.

9. Phase D) Research Phase

If the number of research weeks marked on your lab is at least the minimum required for your invention, you have completed your invention! Starting with the holder of Leonardo, you:

• Announce which *requested invention(s)* you have completed.

• Confirm that you have enough research weeks for the invention.

• Reveal the components under your laboratory, and return them to the matching shops on the board.

• Remove the work counter from your laboratory.
• Take the appropriate number of Florins from the bank.
If the invention is still on the board, you receive the **higher** number of Florins shown on the invention, even if more than one player completes the invention at the same time!
If another player already completed the invention on an earlier turn, you still earn the **lower** number of Florins.

You receive a discount of **2** research weeks for each invention you have collected that is the **same type** as the one you are working on. You must have the invention in front of you to get the bonus. This bonus is counted only at the end of your research, **not each turn!**
Note: inventions realized during the **same** turn **do not** grant this discount.
Example: The yellow player has invention #8 in front of him from an earlier turn. Since she is working on invention #13 (which is the same type as #8), she may announce that she has completed the invention when she has collected only 5 research weeks (instead of 7). When she announces this, she immediately adds 2 research weeks to her total in that lab.

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If you are **still working** on an invention that another player has just completed this turn, you must announce it, and reveal the components under your laboratory. Leave these components face up beside the lab. On a future turn, you may complete the invention even though it is no longer **requested** (i.e., face up on the board). When you do complete the invention, you will earn the lower value of Florins.

Of course, you may also choose to cancel this research and work on a different invention in that laboratory. As a reminder, place an invention marker on your laboratory, and point it towards the player who owns the invention you are working on.
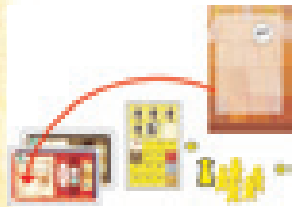
If you are the **only** player who completed that **requested** invention that turn, then you not only receive the Florins, but you also take the invention card and place it face up in front of you. This invention will give you the specialization discount.

*Example: Since yellow was the only player who completed invention #13 this turn, she takes 8 Florins from the bank and places invention #13 face up in front of her. If she works on another invention of that type, she will now have **4 discount research weeks**!*

But, if more than one player completes the invention on the same turn, they will have to bid to see who takes the invention card. First, each player who completed the invention that turn takes the full Florin value shown (stated in black).

Then, secretly choose how many Florins you want to bid, covering them with your hand (you can use the "0" Florins card as a bluff if you wish). All bids are revealed at the same time. If you are the player with the highest bid, pay your full bid to the bank and take the invention card (you always take your "0" Florin cards back!). All other players keep their bids. If there is a tie for the highest bid, the high bidder first in turn order (holding Leonardo, or closest to him clockwise) takes the card. If **all** bidders bid **zero** Florins, no one takes the card and it is returned to the box.

Once you have earned an invention card, you keep it in front of you for the rest of the game.

10. End of the turn. New Turn Begins   +1

Once the Research Phase is complete:

· **On turns 1 through 7:** Add 1 Florin from the bank to the Council. Then turn over enough inventions to fill the *requested inventions* area of the game board (see part 3: *Equipments and Set-up for Beginners*):

- For **4** or **5** players: 5 inventions
- For 3 players: 4 inventions
- For 2 players: 3 inventions

· **On Turns 8 and 9:** These turns are "pure research" turns. You can only conduct research in your laboratories on these two turns. You may **not** place any workers in the city areas (see part 7: *Phase B) Assignment Phase*), and those areas are not resolved on these turns.

When the turn is over, move the turn marker forward one space. Then the next turn can begin!

11. End of the game and winner

When the 9th turn is over, the game ends! You receive a bonus if you have a variety of different types of inventions in front of you at the end of the game:

• 5 different types: 20 Florins
• 4 different types: 13 Florins
• 3 different types: 8 Florins
• 2 different types or less: 0 Florins.

The player with the most Florins is crowned the victor by Leonardo da Vinci!

If there is a tie for the most Florins, the tied player with the most inventions in front of him is the winner (if still tied, the most gold inventions, then the most silver inventions, etc.).

Variant. "CODEX LEONARDI – I". *Powerful Council*

Players who don't think that the Council is powerful enough can use this optional rule if all players agree: If you choose action 1 of the Council ("move an apprentice"), you may move **any player's apprentice** (never a master!) that is not in the Council or a laboratory to another area of the city. If you move **another player's** apprentice, you may not place it in any area where that player is already ranked highest.

Appendix. Turn 0: Starting Set-up for Experts

For more strategy in the early game, use this variation, instead of starting with the resources described in section 3:

The starting player gets Leonardo.

The board is set up as described in section 3 with only one change: The starting requested inventions are not selected. Instead, build the deck as described in section 3 first, and then pull the correct number of inventions and place them face up on the board (based on the number of players). With **two players** before you shuffle the remaining inventions (pace *c*) of the deck building, discard face up near the board one bronze invention, one copper invention and one silver invention: these inventions won't be used during the game.

Each player chooses a color and gets:
The 3/5 spaces laboratory (3 spaces side up), 2 Working counters, 1 master, 3 apprentices, 3 Florins and

Four or five players	3 *favors*
Three players	2 *favors*
Two players	1 *favor*

In turn order, starting with the holder of Leonardo, choose 1 *favor* from this list. Continue choosing favors clockwise until all players have the appropriate number of favors.

  a)   5 Florins
  b)   4 components of your choice (maximum two of each type)
  c)   1 apprentice
  d)   Your choice of:

d.1)	upgrade your 3-space laboratory to the 5-space side	+ 1 component of your choice
d.2)	take your 4-space laboratory	+ 1 component of your choice
d.3)	upgrade your 4-space laboratory to the 6-space side (if you have it)	+ 1 component of your choice
d.4)	take a mechanical man and place it in its relevant space.	

Important: In a **4 or 5 player game**, you may not choose the same option (*a*, *b*, *c*, or *d*) more than twice!

The initial set-up is now finished! Move the turn marker forward one space to the "1": the game can begin!

Inventions:
1. Automatic hammer, 2. Secured pulley, 3. Dimensioned sling, 4. Fortified house, 5. Viewing ocular; 6. Unassailable dome, 7. Underwater tank, 8. Theatral latch, 9. Glass palace, 10. Reflecting window; 11. People-thrower catapult, 12. Bellows machine, 13. Aiming crossbow, 14. Slowing down flight, 15. Enlightening lens; 16. Double bomb dropping gear, 17. Extracting tool, 18. Flying machine, 19. Lifting tower, 20. Burning mirror; 21. Automatic drill, 22. Impassable wall, 23. Invisible craft, 24. Vaporizing kiln, 25. Mimetic ocular.