



JAMES NAYLOR

# MAGNATE

THE FIRST CITY

## RULEBOOK

*Humbleburg was a sleepy place not far from the big city. With its wide clean boulevards, friendly neighbours and open green spaces it had long been a haven for commuters looking for the quiet life.*

*Year after year, its most prosperous residents – wealthy enough to buy their way in or lucky enough to inherit – had fought off any attempt to disrupt its exclusive, idyllic existence by blocking all development of any kind.*

*Then, at last week's council meeting, everything changed.*

*In a unanimous decision the council announced they'd dropped all zoning laws and opened up the city to unrestricted development. The moment the shocked gasps of everyone in attendance had finished echoing around the council chamber, every PA, assistant, and junior executive in the property business raced to contact their boss: 'It's on!'*



## DO NOT OPEN THIS RULEBOOK YET!

If you are playing Magnate for the first time, we recommend using the game's **tutorial deck**.

It will teach you how to play, as you play your first game, with almost no use of the rulebook at all. If you enjoy learning games by reading rulebooks cover-to-cover, feel free to go right ahead and do that instead. But we strongly recommend the tutorial for most players. However, we do not recommend it for solo play.

## TO START:

Simply unseal the tutorial deck, draw the top card and start reading it out loud. It will guide you from there. **DO NOT SHUFFLE THE TUTORIAL DECK** (You'll need to put it back in numbered order if you do).

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### SPECIAL ACKNOWLEDGEMENTS

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2021

Rules editing by



## CARD TOKENS

60



Company markers  
(12 per company)

56



'For sale'  
markers (including  
2 spares)

25



Advertising  
tokens

33



Home tenant tokens  
(11 of each subtype)\*

33



Retail tenant tokens  
(11 of each subtype)\*

12



Office tenant tokens  
(4 of each subtype)\*

12



Industry tenant tokens  
(4 of each subtype)\*

12



AI company  
markers

1



Alternative first  
player marker

1



Land price  
marker

## CARD DECKS

78



Tutorial mode cards  
(includes 10 player aids)

31



AI cards\*:

- 9x I cards
- 6x II cards
- 6x III cards
- 8x IV cards
- 2x AI player aids

36



New  
tenants  
cards\*

19



Risk cards\*



# COMPONENTS

## BUILDINGS

8



Small office buildings

3



Superior office blocks

8



Retail units

3



Shopping malls

8



Industrial units

3



Industrial parks

10



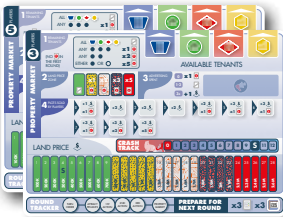
Houses

7



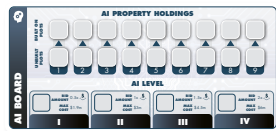
Apartment buildings

## OTHER COMPONENTS



2

Double-sided property market boards (for 2, 3, 4, and 5 players)



1

AI board



20

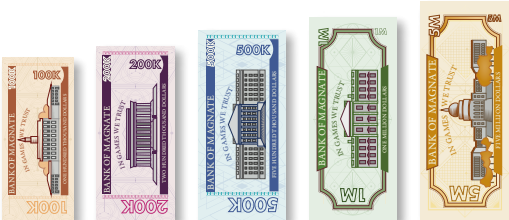
Six-sided dice



5

Money wallets (matching company marker designs)

**210** Banknotes in 5 denominations (\$100k, \$200k, \$500k, \$1m, \$5m)



1



First player marker

1



Crash marker

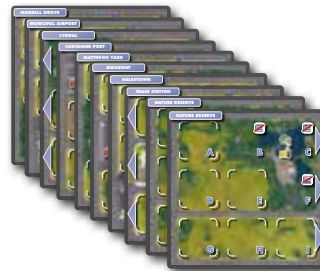
1



Round tracker marker

## NEIGHBOURHOOD TILES & FOOTPRINTS

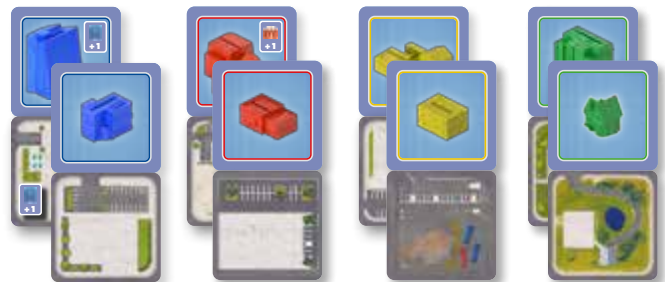
**10** Neighbourhood tiles (10 different designs)



**1** City centre tile



**62** Building footprints (8 different designs to match buildings)



## \*COMPONENT LIMITATIONS

The indicated components: Tenants, 'for sale' tokens, tenant cards, risk cards, AI cards are all limited.

Everything else is unlimited. If you run out of buildings during the game, use the reverse of the building footprints as buildings instead. If you run out of other components, use a suitable proxy instead.



# TUTORIAL SETUP

To help you learn the whole game, the tutorial uses a special fixed **5 player setup**. If you have less than 5 human players you will distribute extra 'dummy' players which the humans will control.

## NOT PLAYING THE TUTORIAL?

This section is **only** used for the tutorial game. If you're playing a regular game, ignore it and skip to page 6.

### A) GET THE CITY READY

**1)** Place the city centre tile in the middle of the play area and place the following buildings and tenant tokens on it all **standard side** up (the light coloured side, not the darker side showing subtype, e.g. "law firm", "warehouse" etc.). Going clockwise from the top left of the city centre tile, add the following to the lettered plots:

**A & B** - Industrial units, each with 1 industry tenant token.



**H & I** - Apartments, each with 3 home tenant tokens.



**G & D** - Retail units, each with 2 retail tenant tokens.



**C & F** - Small office buildings, each with 1 office tenant token.



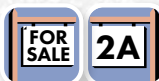
**2)** Place the **specific neighbourhood tiles shown in the diagram (right) in exactly the order shown here**. The arrows on the neighbourhood tiles should be aligned with the numbered arrows on the city centre tile; facing away from the city.

Going clockwise from the top, the following tiles should be placed next to the corresponding numbered arrows of the city centre tile:

- 1** - Halestown
- 2** - Morrell Grove
- 3** - Municipal Airport
- 4** - Matthews Yard
- 5** - Ridgeway
- 6** - Lyndal

Put the rest of the tiles back in the box.

**3)** Separate the spare 'for sale' markers (with blank reverse) from the others and return them to the box.



Place 'for sale' markers with the 'for sale' side up on **exactly the locations shown in the diagram to the right**. The plots are: **1D, 1H, 1I, 2A, 2C, 3E, 3H, 3I, 5E, 5H, 6B, 6H**.

You don't need to try to match the co-ordinates on the back of the tokens to the plots for this tutorial. Put the other markers in the largest compartment of the small removable insert tray to form a supply. Place the small removable tray nearby.

**4)** Put the building insert trays somewhere they can be easily accessed by all players so that players can easily get the buildings they need. Organise the building footprints into four piles near the play area - one for each type of tenant (denoted by colour of the building): homes, retail, offices and industry.





## B) PREPARE THE PROPERTY MARKET

### 5) Find the 5 player property market board.


Place it near the city and return the other property market boards to the box.

6) Make a supply of tenant tokens by placing them into the small removable tray, separated by type. The office and industry tenant tokens use the two smaller compartments.

7) From the tray, take the following number of tenant tokens and place them on the indicated spots in the available tenants area of the property market board, standard side up:  
**6 homes, 6 retail, 2 industry, 2 offices.**

8) Place the crash marker  on position 8 of the crash track.

9) Place the land price marker on the **start (5/4) position** of the land price track.

10) Place the round tracker disc  on the **turn order** space of the round tracker.

11) Shuffle the new tenant cards and place them facedown as the new tenant deck next to the property market board. Do the same with the risk cards to form the risk deck.

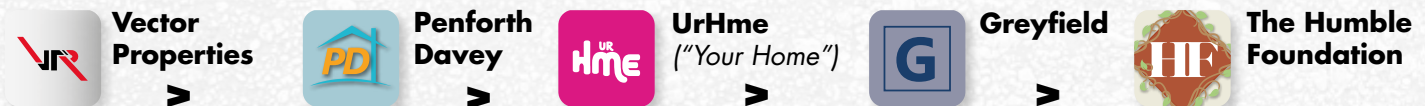
12) Place the advertising tokens into the final empty compartment of the small removable tray to form a supply.

13) Place all the dice nearby.

14) Organise the money into a bank. You can remove the money mini-tray from inside the footprints/money insert and place it by the side of the board (with notes stacked on their side within) or simply organise into piles.

## C) GET THE PLAYERS READY

15) Regardless of the number of human players, set up for 5. **Each player should be placed around the table in a very specific order, going clockwise:**



**THE TUTORIAL WILL NOT WORK IF YOU CHANGE THIS ORDER.**

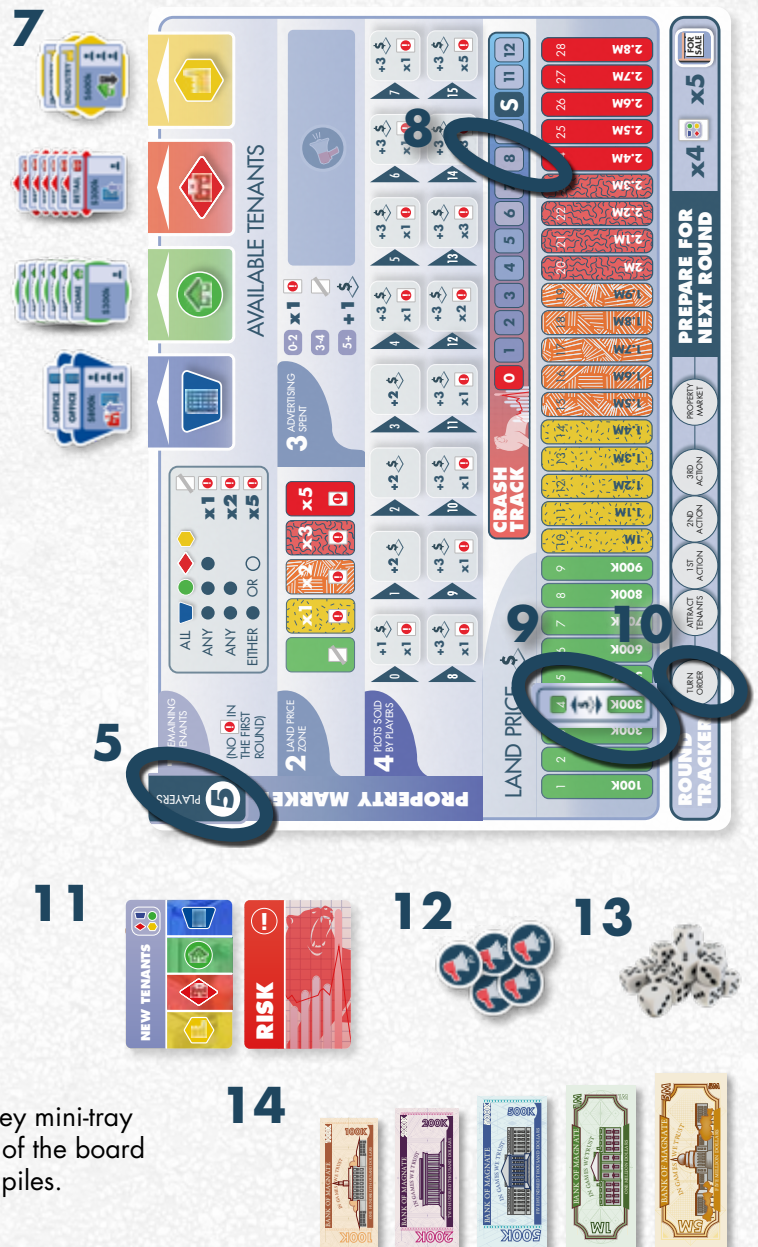
Give each player the following:

- All the company markers of one design and the matching money wallet.
- 4 advertising tokens from the supply.
- 2 million dollars (1x \$1m, 1x \$500k, 1x \$200k, 3x \$100k) placed into their money wallet to keep it secret from the other players.

If you have less than 5 human players, some of these will be 'dummy' players operated by a human player who will be responsible for performing their actions. We recommend giving the dummy players to the humans with the most experience learning new board games.

16) Give the first player marker  to the player controlling Vector Properties.

Read the next tutorial card, setup is now done!





# REGULAR SETUP

## PLAYING THE TUTORIAL? STOP!

This section is for the regular game setup. Start the tutorial from the front cover. If you're looking for the tutorial setup, flip back to page 4.

### A) GET THE CITY READY

**1)** Place the city centre tile in the middle of the play area and place the following buildings and tenant tokens on it all **standard side** up (the light coloured side, not the darker side showing subtype e.g. "law firm", "warehouse" etc.). Going clockwise from the top left of the city centre tile, add the following to the lettered plots:

**A & B** - Industrial units, each with 1 industry tenant token.



**H & I** - Apartments, each with 3 home tenant tokens.



**G & D** - Retail units, each with 2 retail tenant tokens.



**C & F** - Small office buildings, each with 1 office tenant token.



**2)** Shuffle the neighbourhood tiles and place 6 of them at random around the city centre tile. Flip them faceup. They should be oriented so the arrows on the neighbourhood tiles are aligned with the numbered arrows on the city centre tile; facing away from the city.

Put the remaining tiles back in the box. They will not be used in this game.

**3)** If you haven't done so already, separate the spare 'for sale' markers (with blank reverse) from the others and return them to the box.


Put all the other 'for sale' markers in the largest compartment of the small removable insert tray to form a supply. Place the small removable tray nearby.



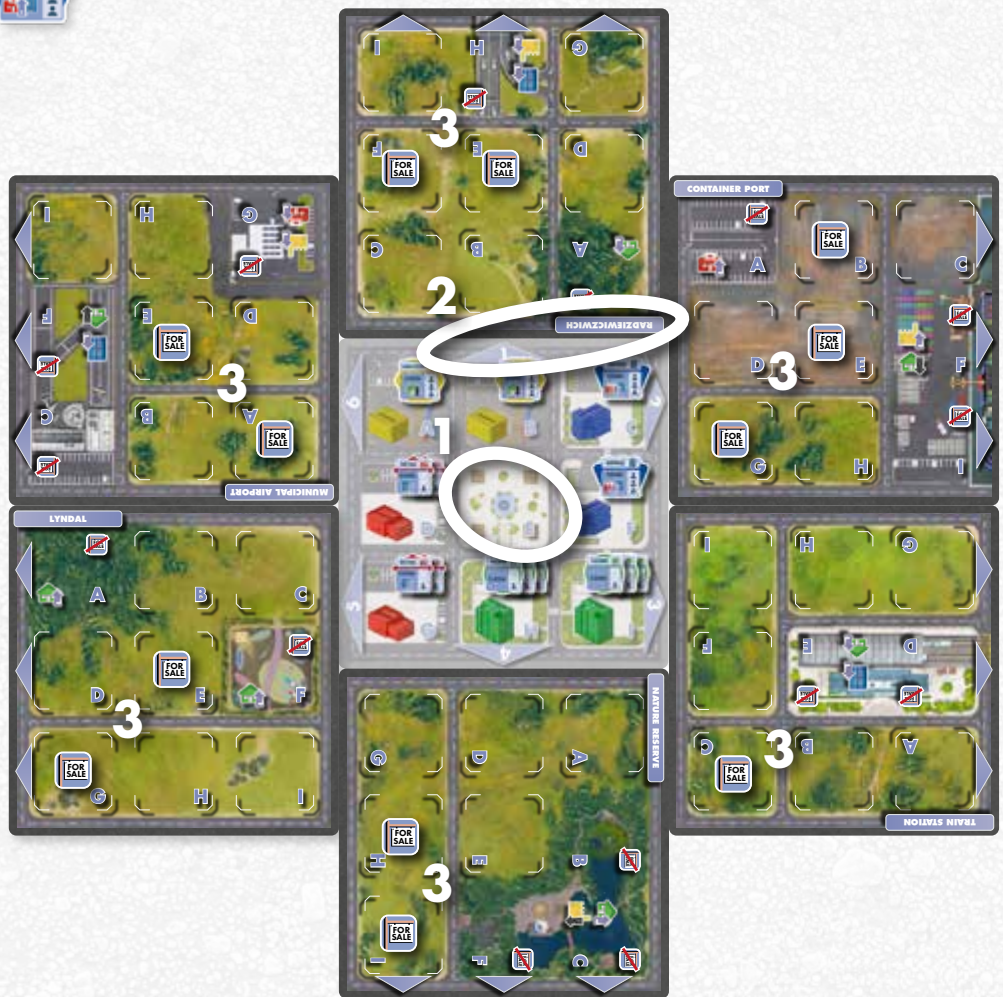
Randomly draw a number of these markers from the supply based on the number of players in the game:

<b>Players</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Markers</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>12</b>

For each marker drawn, look at the co-ordinates on the reverse and place it with the 'for sale' side up on the corresponding plot indicated on the board. The numbers in the arrows on the city centre tile indicate the neighbourhood number. The neighbourhood tiles themselves show the letters of a specific plot (A - I).

If you draw a marker that corresponds to a plot with an icon with a red line through it,  remove it from the game. Draw another and repeat this process until you have placed the total number of 'for sale' markers for the given player count.

**4)** Put the building insert trays somewhere they can be easily accessed by all players so that players can easily get the buildings they need. Organise the building footprints into four piles near the play area - one for each type of tenant (denoted by colour of the building): homes, retail, offices and industry.





## B) PREPARE THE PROPERTY MARKET

**5)** Find the correct property market board for the number of players in this game (indicated in the top left of the board). Place it near the city and return the other property market boards to the box.



**6)** Make a supply of tenant tokens by placing them into the small removable tray, separated by type. The office and industry tenant tokens use the two smaller compartments.


**7)** From the tray, take the following number of tenant tokens and place them on the indicated spots in the available tenants area of the property market board, standard side up:

**2-3 players:** 4 homes, 4 retail, 1 industry, 1 office

**4-5 players:** 6 homes, 6 retail, 2 industry, 2 offices

**8)** Place the crash marker  on the **start (S/10)** position.

**9)** Place the land price marker on the **start (S/4)** position of the Land Price track.

**10)** Place the round tracker disc  on the **turn order** space of the round tracker.

**11)** Shuffle the new tenant cards and place them facedown as the new tenant deck next to the property market board. Do the same with the risk cards to form the risk deck.

**12)** Place the advertising tokens into the final empty compartment of the small removable tray to form a supply.


**13)** Place all the dice nearby.

**14)** Organise the money into a bank. You can remove the money mini-tray from inside the footprints/money insert and place it by the side of the board (with notes stacked on their side within) or simply organise into piles.

## C) GET THE PLAYERS READY

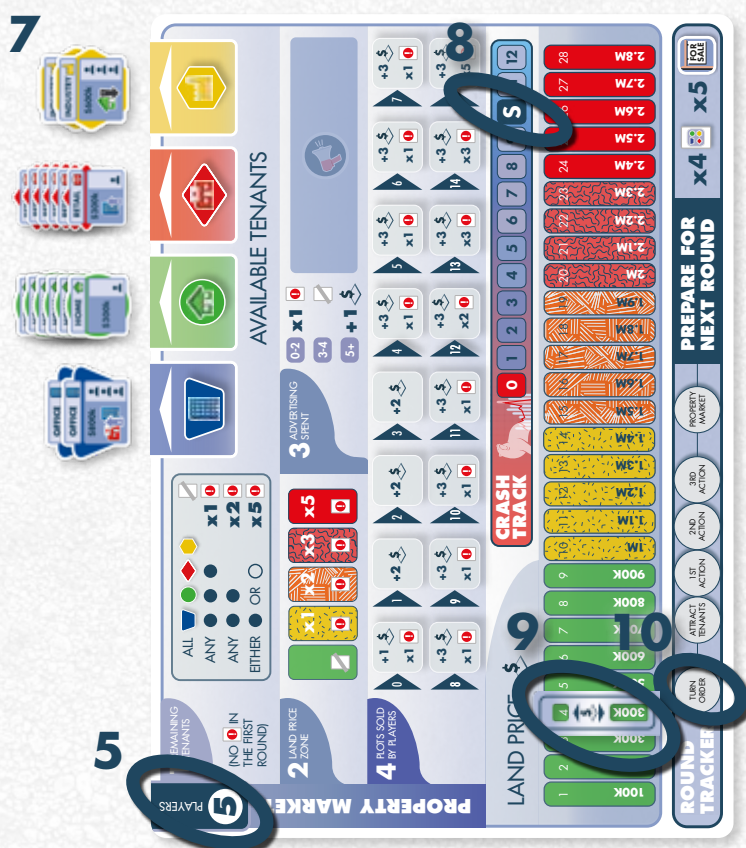
**15)** Give each player the following:

- All the company markers of one design and the matching money wallet.
- 4 advertising tokens from the supply.
- 2 million dollars (1x \$1m, 1x \$500k, 1x \$200k, 3x \$100k) placed into their money wallet to keep it secret from the other players.
- 1 building/action player aid and 1 tenant player aid (these are inside the tutorial deck if you haven't already separated them).

**16)** Give the first player marker  to the last player to move house. Alternatively, randomise the first player.

Setup is complete!

7



11



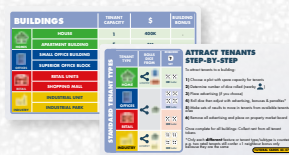
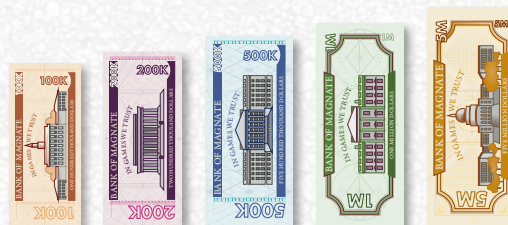
12



13



14





# GAME OVERVIEW

A game of Magnate is played over a series of rounds. Each round, you will take 3 actions to buy valuable plots of land, construct buildings on them, and make them into valuable properties. Each following round, you will get a chance to move rent-paying tenants into your properties. The chance of attracting tenants is based on existing nearby tenants and any bonuses on plots next door to your property.

You can use your rental income to re-invest in more property, buy more advertising or fund bids to be the first player so that you get the first opportunity to get the best land or tenants.

Throughout the game land prices will rise faster or slower depending on the players' actions. There will come a time when you will make more money from selling your buildings than you will earn from renting them out to tenants. Money you make from selling can be re-invested in much larger buildings, earning you even more money.

But the boom can't go on forever. As the game goes on, the property market will also cause risk cards to be drawn which move the crash marker closer to the end of its track. When it reaches the end (after 5 to 10 rounds) the whole market will crash and the game will end. Any property you have left unsold will be sold off for a fraction of its former value.

If a player sells everything they have too early, they'll miss out on bigger profits from their buildings. If they sell too late, they may find they have little money left.

**The player with the most money is the winner.**

## GAME STRUCTURE

The game is played in a series of rounds which continue until the property market crashes and the game ends.

Each round consists of the following five phases, played in order:

- 1) Bid for turn order
- 2) Attract tenants & collect rent
- 3) Player actions
  - 1st action
  - 2nd action
  - 3rd action
- 4) Property market
- 5) Prepare for next round

Use the round tracker to indicate the current phase of the game.

## PHASE 1: BID FOR TURN ORDER

In this phase, players bid against each other to determine who will be the first player this round.

Follow these steps:

- 1) The current first player passes the first player marker to the player to their left (ignore this step in the first round).
- 2) The new first player starts the bidding and may bid any amount (multiples of \$100k) or pass. Players may not bid more money than they have.
- 3) Proceeding clockwise from the first player, each player can choose to outbid the current highest bid or pass. If a player chooses to pass they cannot re-enter the bidding.
- 4) Once all but one player has passed, the highest bidder pays their bid to the bank and takes the first player marker.

**Note:** If all players pass without anyone making a bid, the first player marker remains with the player that received it at the start of this round.

## WHY BID FOR TURN ORDER?

In Magnate, players compete for land and tenants, both of which are often in limited supply. If there is a piece of land or a tenant you and another player both want, the only way to guarantee it for yourself is to go before them.

However, it can sometimes be beneficial to go later in the round in order to see what other players are doing and benefit from their actions.

## EXAMPLE: BIDDING

It is the middle of a 3 player game. Vector Properties went first in the last round so they pass the first player marker to Greyfield who is sitting to their left. Greyfield opens the bidding at \$100k. The bid moves clockwise to Penforth Davey who does not want to bid and chooses to pass. Vector Properties decides to bid \$300k because they have seen a plot of land they want. Greyfield raises their bid to \$400k because they would also like to buy the same plot. Penforth Davey has already passed and so is skipped. Vector Properties thinks \$500k would be too much to pay and passes. Greyfield is the only player remaining, so they now pay their most recent bid of \$400k to the bank and keep the first player marker for the round.



## PHASE 2: ATTRACT TENANTS & COLLECT RENT

In this phase, players take turns trying to attract tenants into their buildings by rolling dice and making pairs or sets to meet the minimum criteria of the tenants they are trying to attract. The location of the plot determines how many dice are rolled and various features on the board provide bonuses or penalties to the results of these rolls. Finally, players collect rent from all of their tenants.

Beginning with the first player and proceeding clockwise, each player takes a turn. On your turn, perform the following steps for each building you own which has not yet reached its tenant capacity (the number of tenant tokens it can hold - shown on the player aid). You choose the order in which you resolve your buildings and attracting tenants is optional; you may choose to attract to some and not others:

- 1) Choose one of your buildings that is not yet at tenant capacity.
- 2) Determine the number of dice rolled based on nearby population.
- 3) You may place any number of your advertising tokens on the plot.
- 4) Roll dice and then adjust with advertising, bonuses, and penalties.
- 5) Make as many sets as you can with your dice that match or exceed the criteria found in the table below (also found on your player aid). For each set you make (if any), take a tenant token of the same type as the property from the 'available tenants' area and move it into the building. If there is not enough capacity for tenants in the building, leave any excess tenants in the available tenants area.
- 6) Regardless of the result, remove all advertising tokens spent on the plot and place them on the 'advertising spent' section of the property market board.

### DETERMINING THE NUMBER OF DICE

The number of dice you roll to attract tenants to a building is equal to the **total population** on nearby tenant tokens of a specific type.

It is important to note that population is not the same as tenant tokens. Each tenant token depicts the population it represents.

**For example:** Retail tenant tokens represent a population of 1, whereas industry tokens represent a population of 3.



### WHAT IS NEARBY POPULATION?









Tenant tokens are considered to be nearby when they are in the **same or an adjacent neighbourhood**. Neighbourhoods are adjacent when they are touching.



**For example:** In this image above, tenant tokens in the neighbourhoods with a green tick are nearby to the building in the middle of the Ridgeway neighbourhood.

Some building types roll dice based on the nearby population of one tenant type (e.g. retail), whereas other building types roll dice based on whichever has the lowest nearby population of two tenant types (e.g. homes).

### BUILDING TYPES & REQUIRED DICE



Type	Required dice set	Number of dice rolled	Why?
Home 	 or better	The lower of either nearby office population or nearby retail population.	People need places to work and places to shop.
Retail 	 or better	Nearby home population.	More potential customers.
Office 	 or better	Nearby home population.	Offices need a workforce.
Industry 	 or better	The lower of either nearby industry population or nearby home population.	Industry needs a workforce and key local suppliers.



## EXAMPLE: DETERMINE NUMBER OF DICE

Greyfield is trying to attract tenants to their apartment building in Ridgeway. Attracting tenants into a home is based on the nearby office and retail tenants only.



**OFFICE:** 9  = 6 

**RETAIL:** 6  = 6 

There are two office tenants each with 3 population in the city centre and there is another one with 3 population by the airport. The total nearby office population is 9.

There are 4 retail tenants in the city centre, each with a population of 1 and another 2 population in the retail building in the Ridgeway neighbourhood itself. The population in the container port is not counted as it is not nearby. The total nearby retail population is 6.

The lower of these two numbers is 6, so Greyfield rolls 6 dice to attract tenants to their apartment.

## ADVERTISING

Each advertising token you committed before rolling your dice may be used to change the value of one of the rolled dice to a 5.

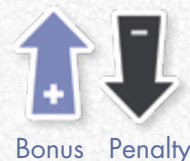


During step 6 of this phase, all advertising tokens, whether used or not, are moved to the 'advertising spent' section of the property market board.

## NEIGHBOUR BONUSES & PENALTIES

Neighbour bonuses come from tenants or amenities that are attractive to neighbouring tenants. Penalties come from tenants or amenities that would make neighbouring plots undesirable.

These bonuses and penalties apply to matching buildings on **adjacent plots** (always including diagonals) in the **same neighbourhood**.



**For example:** a bonus for retail on a feature. A penalty for homes on a tenant.



## EXAMPLE: HOW BONUSES APPLY



Plots A, G, and H all benefit from the retail neighbour bonus coming from the car park on plot D. Plots B and E benefit from both the car park on plot D and the woodland on plot C. Plot F benefits from the woods on plot C. Plot I does not gain any bonuses. **None of the plots in the other neighbourhoods get any benefit because they are not in the same neighbourhood.** Plots C and D are the features providing bonuses and cannot be purchased.

Each neighbour **bonus adds 1** to each die result when attracting tenants. They also **increase** the value of that plot when it is sold (see page 13).

Each neighbour **penalty subtracts 1** from each die result when attracting tenants. They will **decrease** the value of the plot when sold later.

The following rules apply:

- Bonuses and/or penalties from tenants only apply from **different types of tenant** (or different subtypes if you are playing with advanced rules); i.e. only count each tenant type conferring a bonus or penalty to a building once, regardless of how many there are on any adjacent plots (always including diagonals).
- Bonuses and/or penalties from features only apply from **different types of features**; i.e. only count each type of feature once, regardless of how many there are on any adjacent plots (always including diagonals). So, if a plot was adjacent to two woods, only one bonus would apply.



## WHAT IS A FEATURE?

A feature is the background artwork on a plot, which could be a school, woods, airport, etc.

## EXAMPLE: COUNTING NEIGHBOUR BONUSES



Vector's house (1) has two home bonuses on adjacent plots (2 & 3). Both of these bonuses apply, allowing them to add 2 to each die roll. Unfortunately, there is an industry tenant on an adjacent plot (4), giving a penalty, subtracting 1 from each die roll. The net effect is +1 to all die results.

The retail bonus (5) does not apply, nor do the office bonuses conferred by the retail tenants (6) because they do not match.

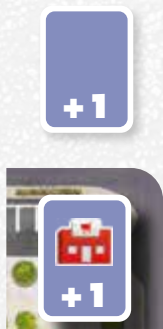
UrHme's office block (7) gets a matching bonus from the retail tenants (6), but bonuses from the same type of tenant do not stack up, so only one of them applies. The office doesn't get a bonus from the woods (2) because the type doesn't match. It isn't affected by the other bonuses and penalties, because they are not on adjacent plots (3,4,5). They do not match anyway.

Lastly Greyfield's retail units (8) get no neighbour bonus or penalty effect this round at all. The bonus (5) matches, but it is not in an adjacent plot. No other bonus or penalty matches the building or is adjacent to it.

## BUILDING BONUSES

The shopping mall and superior office block each have a building bonus.

A building bonus adds 1 to each die result when attracting tenants. This applies only to that specific building itself (not to any other building, adjacent or otherwise). The bonus is shown on the building's footprint.



## FULL EXAMPLE: ATTRACTING TENANTS

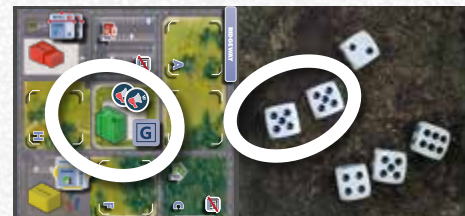
Greyfield is attracting tenants to their apartment.

They choose to place 2 of their advertising tokens on the plot.

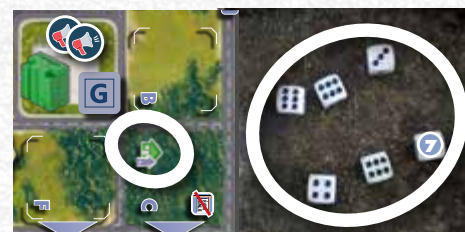
Greyfield then rolls 6 dice and gets the result: 1,2,2,4,5,6.



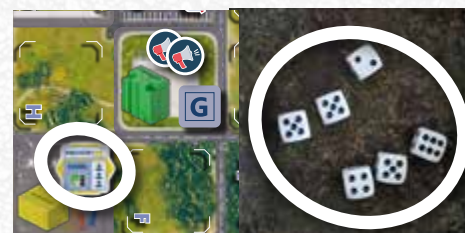
Greyfield uses the advertising tokens to change two of the dice they rolled into 5s.



The woods is adjacent and has a matching bonus so it gives a +1 to all dice results (this can result in dice having values above 6, like 7 as here).



Unfortunately, there is also an industry tenant next door so Greyfield subtracts 1 from all the dice. This leaves their dice as they started before bonuses were applied.



The final dice results are: 2,4,5,5,5,6

Greyfield makes 2 sets (5,5 and 5,6) and moves 2 home tenants into their apartment building from the 'available tenants' area.



They remove the advertising tokens and place them in the 'advertising spent' section of the property market board.

## COLLECTING RENT

Add up all the rent paid by each of the tenant tokens you have on properties you own. Then take the total amount from the bank.



When you collect your money, **put it in your wallet to keep your total secret.** Play now proceeds to the next player in turn order (clockwise from first player).

Once all players have had a chance to attract tenants and collect rent, play proceeds to the actions phase. ■



## PHASE 3: PLAYER ACTIONS

Beginning with the first player and going clockwise, each player takes a turn to perform 1 action. This process repeats until all players have performed a total of 3 actions; i.e. player 1 takes the first action, followed by player 2, then player 3, etc. Then player 1 takes their second action, followed by player 2, and so on.

One of your player aids (in the tutorial deck) summarises the available actions. You may choose the same action more than once in the same round.

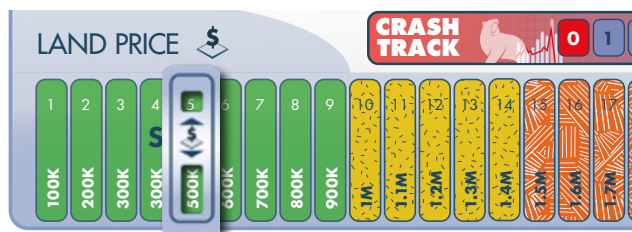
### BUY LAND

When you perform this action, select one plot with a 'for sale' marker on it. Pay the current land price to the bank, remove the 'for sale' marker from the board and place it in the box. Then place one of your company markers on the land to show that you own it.

### LAND PRICE

The land price marker indicates the current cost of buying land. Over the course of the game this will increase (see page 14 for how this works).

**For example:** the current land price here is \$500k.



You may instead buy empty land that is **not currently for sale**. Only plots adjacent to a plot you own, and in the same neighbourhood as that plot, may be purchased this way. Plots that are not currently for sale cost **2x the current land price**. **Note that:**

- Plots showing a 'for sale' icon with a red line through it (features like woods, car parks etc.) can **never** be purchased.
- You can **never** buy or re-buy plots containing buildings. You may buy only undeveloped land that has not yet been purchased by other players.

## BUILD/REBUILD

When you perform this action, choose a building, pay the construction cost (shown on the player aid), place the building's footprint on the plot with the with the bird's eye view side facing up and the building on top of it.

Ensure that the company marker is visible after you place the building to clearly indicate who the building belongs to; most buildings have a slot in the top for the marker.

If there is already a building on the plot, you can replace it by paying the construction cost of the new building and replacing the old one. If the current tenants are of a different type than the new building, place them back in the 'available tenants' area.

## FOOTPRINTS

We recommend you place a small footprint tile underneath your new building as an informational and aesthetic improvement to the game. The footprints for the shopping mall and superior office block show their building bonus effect to help players. However, use of footprints is not required for gameplay.



You can also use the reverse of a footprint tile as a building if there are no more buildings available of the type you want to build. Buildings are not limited.

## ADVERTISE

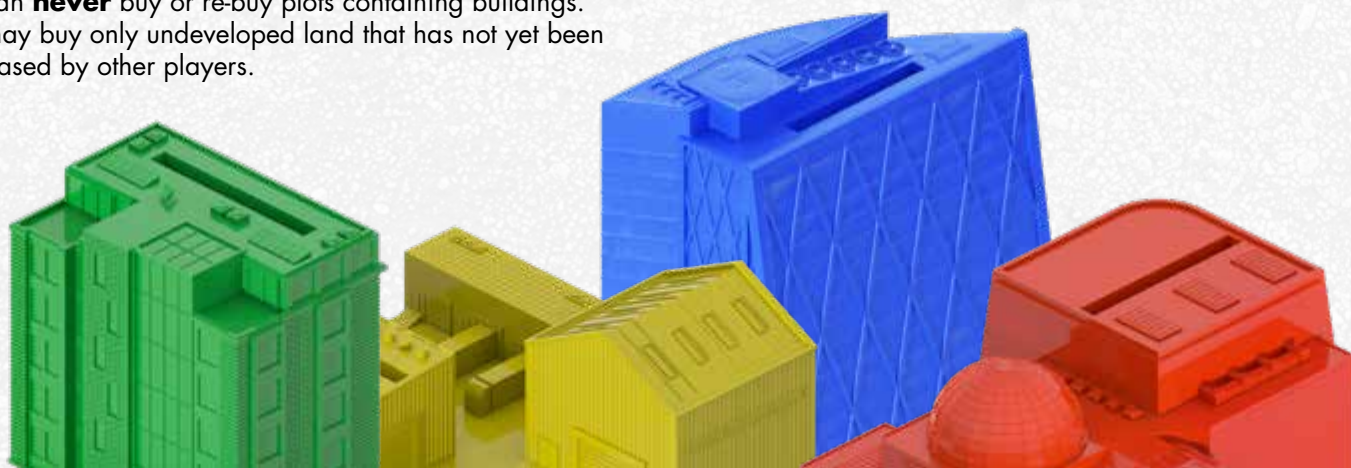
*You've built a nice house... time to get advertising to attract some would-be tenants.*

When you perform this action, gain 2 advertising tokens from the supply for free. You may also buy any number of additional advertising tokens for \$500k per token.

## CONSULT

*Everyone's gotta do the day job sometimes... at least consultancy work pays well.*

When you perform this action, gain money from the bank equal to the current land price.





SELL

After buying land, building something on it, and moving your tenants in, it's time to do the most important thing of all... Sell the plot for a massive profit!

When selling, you permanently give up ownership of one of your plots in exchange for a typically large one-time payment: Usually far in excess of the rent it can generate. The amount is based on the value of the property and the current land price.

WHY SELL?

Unlike in another famous property game, **giving up ownership of your property is not bad.**

In Magnate, it's quite the opposite: As all good developers know, selling at the right time is the most efficient way to make money. Selling a plot can make you more money than the rental income it would have earned in an entire game.

The money gained from selling is best used for purchasing larger buildings. However, as the crash approaches, you'll need to figure out the optimal time to sell your buildings to make the most money.

To perform this action, first select one plot of land you own and calculate the plot's value:

Attribute	Value
The land itself	1
A building on the plot (of any type)	+1
Total population	+1 for <b>each population icon</b> on tenants in the building.
Adjacent neighbour bonuses	+1 per different type of <b>tenant</b> that confers a matching bonus to the building. +1 per different type of <b>feature</b> that confers a matching bonus to the building.
Building bonus	+1 if it has a <b>building bonus</b> .
Adjacent neighbour penalties	-1 per different type of <b>tenant</b> that confers a matching penalty to the building. -1 per different type of <b>feature</b> that confers a matching penalty to the building.

Then, multiply the plot's value by the current land price and take that much money from the bank. **The scoring aid (on the back of the rulebook) shows the money you gain based on value and current land price.**

Finally, remove your company marker from the plot and place it in the lowest-numbered empty space on the 'plots sold by players' area of the property market board.



**Do not remove the building or tenants from the board.** They still remain, but you no longer own the building and will not collect rent from the plot in future rounds.

**Plots may never be sold to other players.**

EXAMPLE: SELLING



Vector Properties has chosen to sell their superior office block (1).

First, the value of the plot is calculated. 1 for the land itself and +1 for the building. It gets +6 for the total population of the tenants (2) in the block and +3 from neighbour bonuses because 3 different bonuses surround it: the airport (3), one or more office tenants (4), and one or more retail tenants (5). It gets another +1 because the superior office block itself has a building bonus for a final value of 12.

Vector then multiplies the value by the current land price of \$1m and takes \$12m from the bank. Vector then removes their company marker from the plot and places it on the second empty space of the property market board (another plot had already been sold earlier this round). ■



## PHASE 4: PROPERTY MARKET

As a result of the players' actions, the property market changes: Land price may increase or risk cards will be drawn which will bring the game-ending crash closer. After making these changes, if the market has not crashed, players will add new land and tenants to the game.

This phase consists of 4 steps, resolved in order. These steps are summarised as numbered sections on the property market board.



Each section indicates when to increase the land price and/or draw risk cards.

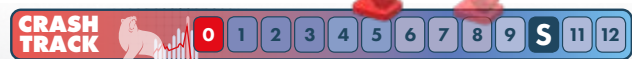
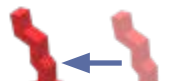
**Note: Do not draw any risk cards in the first round of the game.**

### RISK CARDS

Whenever you draw a risk card, look at the top of the card and move the crash marker a number of spaces to the left as indicated. Ignore the bottom part of the card for now; that will only be used at the end of the game.



**For example:** By drawing this card you should move the crash marker down 3 spaces to position 5.



If the crash marker reaches the leftmost space of the track, do not move it any more, but keep drawing risk cards as required.

Risk cards are discarded faceup. Anyone may look at the already drawn risk cards.

### 1) AVAILABLE TENANTS

If there are fewer than four types of tenants remaining in the available tenants area, draw a number of risk cards instead as indicated on the property market board you are using.

**For example:** in a 5 player game, if there are no available tenants, or only tenants of one type, you draw 5 risk cards.



### 2) LAND PRICE ZONE

Draw the number of risk cards corresponding to the coloured zone the land price marker is currently occupying.

**For example:** The land price marker is in the amber zone, so 2 risk cards would be drawn.



### 3) ADVERTISING SPENT

Compare the number of advertising tokens used this round to the table on the property market board.



- If a low number of advertising tokens were used, draw a risk card.
- If a moderate number of advertising tokens were used, nothing happens.
- If a high number of advertising tokens were used, move the land price marker up by 1.

Once complete, remove the advertising tokens from the board and return them to the supply.

### 4) PLOTS SOLD BY PLAYERS

Move the land price marker up a number of spaces as shown in the lowest-numbered visible plots sold space; i.e. the first space without a company marker.

**Remember: Company markers get placed here when a plot of land is sold.**

**For example:** Here, the land price increases by 2.



If the space also contains a risk card icon, draw the indicated number of risk cards.

Once complete, remove any company markers from this track and return to players.



## PHASE 5: PREPARE FOR NEXT ROUND

If the crash marker has reached the last space of the crash track, the market crashes and the end of the game is triggered. If this happens, skip this phase and proceed to the end of game (below).

If the market has not crashed, perform the following steps:

### ADD NEW TENANTS

Draw the number of new tenant cards indicated on the bottom right of the property market board. Add the indicated tenants on each card to the 'available tenants' area.



Ignore the subtype section of the card unless you are playing with the advanced rules (see right hand column). Then, discard the cards to the box. Any player may examine the discarded cards at any time.



### DRAW NEW PLOTS

Randomly draw the number of 'for sale' markers indicated on the bottom right of the property market board. For each marker drawn, look at the co-ordinates on the reverse and place it with the 'for sale' side up on the corresponding plot indicated on the board.



If you draw a token with coordinates for a plot that is already owned by a player or the plot has an icon of a token with a red line through it, return that token to the box. Do not draw a replacement (unlike during setup). It could happen that no new plots of land are added because of this.

**The next round now begins.**

## END OF THE GAME: THE MARKET CRASHES!

When the crash is triggered, perform the following steps:

**1) Determine how deep the crash will be** - Take all the risk cards drawn this game and add up all the numbers on the **bottom part** of each card. Then, move the land price down by this amount.

**2) Sell all remaining unsold plots** - All remaining plots are now immediately sold using the new, post-crash land price. It is recommended that each player sell their plots one at a time, removing their company marker for each sale to help keep track. Return company markers back to the players; do not place them on the property market board.

**The player with the most money is the winner.** If two or more players tie for the most money, they share a joint victory.

## ADVANCED RULES: TENANT SUBTYPES

In the advanced game, each tenant type has three subtypes. Each subtype can have different neighbour bonuses, rental values, and the sets of dice required to attract them into buildings.

These rules significantly increase the range of possibilities and outcomes in the game. **We recommend you use these rules after you've played Magnate at least once.**

In the advanced rules, use the reverse side of the tenant tokens. The standard side of the tenants will not be used in this game.



### SETUP

Follow the setup instructions as usual with the following changes:

- 1) Before you start setting up any tenants, make sure all the tenants are standard side up so you can't tell which advanced tenants they will be.
- 2) When placing tenant tokens in the city centre, and in the 'available tenants' area, randomly take the required number of tokens without looking at the other side and place them standard side up. Once they are all placed, flip them all to the advanced side.

### ATTRACTING TENANTS

After making dice sets, all normal rules apply: You must still attract tenants of the same type as the building, but can freely choose which subtype(s) of tenants you want to take from the available tenants area up to the tenant capacity of the building.

The requirements of each advanced tenant can be found on the reverse (advanced side) of the tenant player aid.

**For example:** Greyfield rolls two 4s and four 6s when rolling for their apartment. 4s are not high enough to attract professional couples or families, so Greyfield moves in some students with the 4s. With their 6s, Greyfield can move in any subtype. Greyfield chooses one family (because they pay a lot of rent) and a professional couple because they want to use the retail neighbour bonus later in the game.

### ADDING NEW TENANTS AT END OF ROUND

Use the subtype part of the new tenants cards to determine which tenants go into the available tenants area. Add these tokens advanced side up.

If there are no more tenants of a certain subtype that the card indicates, they are skipped; do not add tenants of other subtypes instead. ■



# AI MODE



Magnate's card-driven AI can be used to **replace a human player in a game at any player count.**

This allows a single player to play Magnate by themselves (solo mode) but it also allows a pair or group to experience an additional, new type of opponent at the table and differing player count dynamics.

The AI mode can be used with or without advanced tenants but is usually **easier and more interesting** with advanced tenants.

The AI gets stronger during the game, just like a human opponent. It will gradually "level-up" through a set of different AI action decks, bidding more aggressively and constructing bigger buildings as it does.

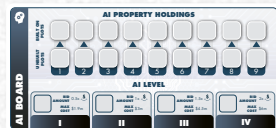
## SETUP

**1)** Set the game up as normal, counting the AI as a human player for the purposes of setup. If you are playing solo, then you would use the 2 player property market board. If you were playing with 2 people and the AI, you would use the 3 player board, and so on.

**2)** Instead of setting up the AI player as a normal opponent, give it \$2m as 2x \$1m notes and the AI company markers only. Do not give it any advertising tokens. Make a space for its money to go.



**3)** Place the AI board nearby.



**4)** Take the AI Action cards and separate them into four decks based on their level (depicted on the backs).



Shuffle each deck separately and place them on the indicated spots on the AI board. Make sure the 'first AI action' card is the top card of the level I deck.

**5)** Place one of the AI's company markers on the level I space on the AI board.

**6)** Select the difficulty setting you wish to play at and note this down:

- **Digital assistant** - Recommended for new players
- **Generalised AI** - Recommended for experienced players
- **Robot overlord** - Recommended for players looking for a very substantial challenge
- **The Singularity** - Will you be one of the only people in the world to conquer this AI?

## GENERAL RULES

- The AI player never has to pay money for the actions it takes.
- The AI never spends or loses money for ANY reason.
- The AI player never collects rent. It only gains money when selling or consulting.
- The AI draws cards to decide its actions from the deck of the level it has currently reached.

## PHASE 1: BID FOR TURN ORDER

**The AI only uses the following bidding rules in a solo game against a single human opponent.** If you are using the AI with 2 or more human players, the AI does not bid. Instead, the AI always passes. It can only be the first player if the first player marker was passed to it and all human players pass.

When it is the AI's turn to bid, it bids a fixed amount indicated on the bid instructions outlined next to the AI's current level on the AI board: The highest level deck it is currently drawing from. The amount the AI bids is based on the current land price and is rounded up to the nearest \$100k.

The AI only bids once each round. If you outbid the AI, or the AI's bid does not exceed your bid, then it will simply pass. As normal, if you choose not to outbid the AI, the AI will go first.

### Example:

The AI is at level 3 and the current land price is \$1.1m. The AI bids 1.5x the current land price. This results in a bid of \$1.65m which is rounded up to \$1.7m. The player bids \$1.8m, outbidding the AI. The AI passes because it was outbid and can only make one bid per round.

## PHASE 2: ATTRACT TENANTS

When attracting tenants, the AI will attempt to attract to every property it owns that has not reached its tenant capacity. When attracting tenants, it does not roll any dice. Instead, all dice it would have rolled are automatically considered to have been sixes. Tenants are moved in from the area based on this result. **Note: The AI is still limited by the number of dice it would roll.**

- The AI always attracts tenants to properties in order, left-to-right along the AI property holdings section of the AI board.
- If playing the advanced game, the AI will always prioritise moving in the tenants with the most difficult roll requirements, even if this means it gets fewer tenant tokens than it could have otherwise. If there are multiple tenants with the same roll requirements, it will choose the one with the highest rent. If still tied, choose at random.

Once the AI has finished attracting tenants, check the advertising icon on the bottom right of the most recently discarded AI action card. Add the number of advertising tokens indicated there to the 'advertising spent' section of the property market board from the supply.





## PHASE 3: ACTIONS

When it is the AI's turn to take an action, draw the top card of the deck corresponding to the current AI level. The top section of the card indicates the particular action the AI takes. This is often dependent on the current land price or the position of the crash marker.

If the AI cannot complete the indicated action on the card, then it will follow the default action indicated in the bottom left of the card instead.

After resolving the card, place it faceup on a discard pile.

- If you need to draw a card from an AI deck and there are no cards left in it, move the AI's company marker up to the next level on the AI board. Then, draw a card from the deck corresponding to the new level.
- If the level IV deck runs out of cards, take the level IV cards from the discard pile and shuffle them to make a new deck.
- In the unlikely event the AI cannot perform the top action or the default action, it consults.
- **Note: For its very first action of the game, the AI will always take the buy land action as indicated on the "first action" card that goes on top of the level I deck.**

### Action card types

#### One named action only

The AI takes the indicated action on the card. If it can't, then it will follow the default action indicated in the bottom left of the card instead.

#### Greater than/equal to or below a land price

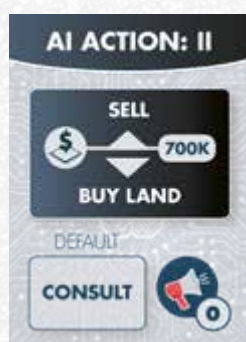
If the current land price equals or exceeds the amount indicated on the card, the AI takes the top indicated action. If the current land price is lower than the amount indicated, the AI takes the bottom indicated action.

If it can't complete the indicated action based on the current land price, it does the default action instead.

#### Greater than/equal to or below a position on the crash track

If the crash marker's current position equals or exceeds the indicated position on the card, the AI takes the top indicated action. If the position of the crash marker is lower, the AI takes the bottom indicated action.

If it can't complete the indicated action based on this position, it does the default action instead.



## AI action rules

**Buy land** - To determine which plot of land the AI buys, look at all the currently 'for sale' plots of land and compare how many bonus arrows could apply to each plot (adjacent, including diagonals and in the same neighbourhood). The AI will always buy the plot of land that has the greatest total number of bonus arrows that could apply (not the overall effect of those arrows). If multiple plots tie for having the most bonus arrows, determine which one the AI buys randomly (roll a die). **Remember: The AI does not pay for the land. It simply gains the plot.**

#### For example:

- If there are two tied plots, roll a die. If it shows 1-3, it buys the first eligible plot. If it shows 4-6, it buys the second available plot.
- If there are three tied plots, roll a die. If it shows 1-2, it buys the first eligible plot. If it shows 2-4, it buys the second eligible plot. If it shows 5-6, it buys the third eligible plot.
- If there are four tied plots, roll a die. If it shows 1, it buys the first eligible plot. If it shows 2, it buys the second eligible plot. If it shows 3, it buys the third eligible plot. If it shows 4, it buys the fourth eligible plot. If it shows a 5 or 6, reroll until it shows a 1, 2, 3, or 4.

Place one of the AI's company markers on the tile as normal, but **do not discard** the 'for sale' marker. Instead, flip it over to its co-ordinate side and place it in the leftmost open space of the **bottom row** of the AI property holdings section on the AI board.

The AI can only purchase plots of land with 'for sale' markers.

**Build** - When taking the build action, the AI will build on the leftmost plot on its AI property holdings area that does not yet have a building on it.

First, the AI will pick which type of building it will construct on the plot. This is always whatever type would benefit from the highest total matching bonuses (after deducting penalties) the plot has. If there is a tie, it will then build whichever of those tied building types has the most total population remaining in the available tenants area. If there is still a tie, the AI will choose at random between the tied types (using the same randomisation method listed above).

Once the AI has picked the type, it builds the most expensive building of that type it can currently build. The maximum price of a building an AI of that level can construct is indicated on the AI board.

Push the corresponding 'for sale' marker for the plot it just built on up to the **top row** of the AI property holdings area. This will help you keep track of which plots have already been built on for the next time the AI takes the build action.

#### Example:

The AI has just built on plot 3B. So the corresponding 'for sale' token is moved up to the top row.





**Sell** - The AI will always choose to sell the leftmost plot on the AI property holdings area that has a building. **The AI never sells plots that do not have buildings on them** (except at the end of the game, after the crash).

When selling, the AI follows the normal rules but, in addition, gets an additional special bonus or penalty to the value of its plots, based on the difficulty setting chosen during setup:

- **Digital assistant:** The AI gets a -1 penalty to plot value when selling.
- **Generalised AI:** No change.
- **Robot overlord:** The AI gets a +1 bonus to plot value when selling.
- **The Singularity:** The AI gets a +2 bonus to plot value when selling.

Remember to place the company marker from that plot onto the 'Plots sold by players' section of the property market board as normal. In addition, discard that plot's corresponding 'for sale' marker from the top row of the AI property holdings area and slide all the other markers on that track left to fill the gap(s) made.

Lastly, as a result of selling, the AI moves up one level (unless the AI has already reached level IV). Move the AI's company marker up one level to help you track it. From this point forward, when it is the AI's turn, it will draw cards from this new level deck.

**Consult** - The AI gains money equal to the land price as normal.

## PHASES 4, 5, & END OF THE GAME

These phases and the end of the game all operate identically to the normal multiplayer game without the AI. Carry them out as normal.



### Do neighbour bonuses count across neighbourhood boundaries?

No. Neighbour bonuses only apply in the same neighbourhood.

### Do neighbour bonuses affect all plots in a neighbourhood?

No. Neighbour bonuses only affect adjacent plots (the 8 plots around it) in the **same** neighbourhood.

### Can I attract tenants from an opponent's property?

No. Tenants can only be attracted from the 'available tenants' areas.

### The land I want to sell has no building yet. Do neighbour bonuses/penalties affect it?

No. As there are no matching symbols, neighbour bonuses or penalties do not affect the sale value.

### The plot I want to sell would have a zero or negative value this round. Do I get any money for selling it?

If a plot of land would have a negative value, it's worth zero instead. You do not get any money for the sale of a property with no value.

### If a large building (e.g. superior office block) already has tenants that have a neighbour bonus, does the same building also get a neighbour bonus from these tenants?

No. Neighbour bonuses only apply from adjacent plots. You do not get a neighbour bonus from a tenant inside the same building you are trying to attract further tenants to.

### How do I judge if the crash is coming?

There are 19 cards in the deck, 8 of which are 0s that do not affect the crash track. If there are a lot of these 0s in the risk discard pile then you can expect the market to crash relatively quickly from that point onwards. The composition of the risk deck is as follows:

Value	0	-1	-2	-3
Quantity	8	4	3	4

### What happens if I run out of building miniatures?

Buildings are not supposed to be limited. You can use the reverse of the building's corresponding footprint to represent a building if you run out of the correct type of miniature.

### Can I trade with other players?

No. You cannot trade money, property, or anything else you own with other players.

### Which plots in the nature reserve are affected by its bonus and penalty?

All plots on the tile, except for plot G are affected: They are all adjacent to the feature. None of the plots adjacent to G have bonuses or penalties.

### Who do the banknotes portray?

Four of the banknotes show backers of the game who pledged at the highest level or their loved ones. The 5m note is a tribute to the designer's mother, Jean Naylor (1958–2015).



## THE COMPANIES OF MAGNATE



Vector Properties sees itself as the ultimate “work hard, play hard” business. They’re always ultra-professional and slickly presented to their clients. Based in swanky offices and wearing perfectly tailored suits, Vector’s team are hyper-aggressive risk-taking worshippers of a “Wolf of Wall Street” mentality. At the office, or out-on-the-town until late at night, their top sales people are constantly competing to assert their status as the Alpha. At Vector the size of your property deal is the ultimate test of your manhood. How long will it take for their lifestyle and exceptional risk taking to catch up with them?



Penforth Davey is an old fashioned family-run property firm with its roots in suburban housebuilding in the interwar years. Once widely trusted for their cosy family-friendly values, a series of PR and marketing missteps has seen the company fall on hard times, showing them to be as out of touch as their once famous - and now quietly retired - “Local homes for local families” slogan. Their offices are old and creaking - their business practices older and creakier: Some of their sales staff only just recently learned to use email. But the youngest and most ambitious scion of the Penforth family was just made the CEO and they’re looking to shake things up: As far as they’re concerned, PD needs to be dragged kicking and screaming into the 21st century - in their view the time for ‘nice’ is well and truly over.



Run by ex-Silicon Valley tech entrepreneurs, “UrHme” (pronounced “your home”) is - apparently - on a mission to build affordable homes for young people increasingly locked out of the housing market. Their slick website and conversationally-toned marketing literature is littered with revolutionary slogans about taking power back for the young and images of carefree twenty-somethings having fun. They would say their co-living facilities revolutionise the way people will live and work. Others might say the minuscule floor space to their apartments represents an amazing return on investment. Since UrHme seem to have become curiously diversified in their property investments of late... you’ll have to be the judge.

## Greyfield

Greyfield’s obscure origins were as a company providing power for early district electrical systems more than a hundred years ago. Now their holdings are so vast and numerous it’s not clear to even say what business this huge multinational is in. Nuclear power? Ball bearings? Chemicals? Public sector contracting? Finance? Greyfield’s property division is but one part of a sprawling corporate empire that quietly eschews the limelight in favour of a bland and tasteful corporate image that gives nothing away. Will anything stop their gradual and relentless advance?



A non-profit trust founded by a clique of the city’s current affluent residents, the Humble Foundation’s stated aims are clear: To preserve the architectural character and quiet dignity of the community as it is today, free from the ‘undesirable elements’ large scale development will bring. But what better way to keep ‘undesirable elements’ out and preserve that character than run all the large scale development yourself? Questions have been raised about the Humble Foundation’s complex finances and where some of the money ends up, but you can’t fault the tastefulness of their architectural plans.



# SCORING AID FOR PLOT SALES

## IN \$ MILLIONS

Read off land price and plot value to work out how much money you gain

LAND PRICE \$ 



	300K	400K	500K	600K	700K	800K	900K	1M	1.1M	1.2M	1.3M	1.4M	1.5M	1.6M	1.7M	1.8M	1.9M	2M	2.1M	2.2M	2.3M	2.4M	2.5M	2.6M	2.7M	2.8M
2	600K	800K	1	1.2	1.4	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2	3.4	3.6	3.8	4	4.2	4.4	4.6	4.8	5	5.2	5.4	5.6
3	900K	1.2	1.5	1.8	2.1	2.4	2.7	3	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6	6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4
4	1.2	1.6	2	2.4	2.8	3.2	3.6	4	4.4	4.8	5.2	5.6	6	6.4	6.8	7.2	7.6	8	8.4	8.8	9.2	9.6	10	10.4	10.8	11.2
5	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14
6	1.8	2.4	3	3.6	4.2	4.8	5.4	6	6.6	7.2	7.8	8.4	9	9.6	10.2	10.8	11.4	12	12.6	13.2	13.8	14.4	15	15.6	16.2	16.8
7	2.1	2.8	3.5	4.2	4.9	5.6	6.3	7	7.7	8.4	9.1	9.8	10.5	11.2	11.9	12.6	13.3	14	14.7	15.4	16.1	16.8	17.5	18.2	18.9	19.6
8	2.4	3.2	4	4.8	5.6	6.4	7.2	8	8.8	9.6	10.4	11.2	12	12.8	13.6	14.4	15.2	16	16.8	17.6	18.4	19.2	20	20.8	21.6	22.4
9	2.7	3.6	4.5	5.4	6.4	7.2	8.1	9	9.9	10.8	11.7	12.6	13.5	14.4	15.3	16.2	17.1	18	18.9	19.8	20.7	21.6	22.5	23.4	24.3	25.2
10	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
11	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11	12.1	13.2	14.3	15.4	16.5	17.6	18.7	19.8	20.9	22	23.1	24.2	25.3	26.4	27.5	28.6	29.7	30.8
12	3.6	4.8	6	7.2	8.4	9.6	10.8	12	13.2	14.4	15.6	16.8	18	19.2	20.4	21.6	22.8	24	25.2	26.4	27.6	28.8	30	31.2	32.4	33.6
13	3.9	5.2	6.5	7.8	9.1	10.4	11.7	13	14.3	15.6	16.9	18.2	19.5	20.8	22.1	23.4	24.7	26	27.3	28.6	29.9	31.2	32.5	33.8	35.1	36.4
14	4.2	5.6	7	8.4	9.8	11.2	12.6	14	15.4	16.8	18.2	19.6	21	22.4	23.8	25.2	26.6	28	29.4	30.8	32.2	33.6	35	36.4	37.8	39.2
15	4.5	6	7.5	9	10.5	12	13.5	15	16.5	18	19.5	21	22.5	24	25.5	27	28.5	30	31.5	33	34.5	36	37.5	39	40.5	42
16	4.8	6.4	8	9.6	11.2	12.8	14.4	16	17.6	19.2	20.8	22.4	24	25.6	27.2	28.8	30.4	32	33.6	35.2	36.8	38.4	40	41.6	43.2	44.8
17	5.1	6.8	8.5	10.2	11.9	13.6	15.3	17	18.7	20.4	22.1	23.8	25.5	27.2	28.9	30.6	32.3	34	35.7	37.4	39.1	40.8	42.5	44.2	45.9	47.6
18	5.4	7.2	9	10.8	12.6	14.4	16.2	18	19.8	21.6	23.4	25.2	27	28.8	30.6	32.4	34.2	36	37.8	39.6	41.4	43.2	45	46.8	48.6	50.4
19	5.7	7.6	9.5	11.4	13.3	15.2	17.1	19	20.9	22.8	24.7	26.6	28.5	30.4	32.3	34.2	36.1	38	39.9	41.8	43.7	45.6	47.5	49.4	51.3	53.2
20	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56

PLOT VALUE

