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GRIDOPOLIS[®]

A 3D Tabletop Game & System



SEVEN BASIC PARTS. UNLIMITED CREATIVE PLAY!

LESSON PLAN 02 for STRATEGY GAMES

GAME DESIGN GUIDE

This Game Design Guide
works best if you have
already played Gridopolis

Download the QuickStart, instructions,
and free game design blueprints
at www.gridopolis.info.



Why game design?



Game-based learning has tremendous advantages and can teach a powerful mix of logic, strategy, creativity, and critical thinking.

The Gridopolis Game Design Guide offers each of these benefits – all within a fun, social and screen-free environment.



Students can design their original games solo or in groups.

During the testing phase [section 6 / page 12] students play their game with others.

Knowledge Objectives



Students will practice planning, strategizing, and playing in three dimensions.



Skills to be addressed:

- Visualization in 2D and 3D
- Creativity & concentration
- Strategy
- Critical thinking
- Logic & planning

Behavioral Objectives



Students collaborate as they communicate their rules. They work individually and play in competition.



Skills to be addressed:

- Socialization
- Negotiation
- Communication
- Cooperation & Collaboration

Assessment Activities



After the game design is completed, ask students about their experience:

- Designing their own game
- Playing in three dimensions



What are examples of things that have different dimensions?

- 1 dimension [line, string]
- 2 dimensions [window, paper]
- 3 dimensions [box, apple, house]



How is a three-dimensional game more challenging than a two-dimensional game? How is it easier? Encourage students to explain their reasoning.



SECTION 1

Design your grid-set



SECTION 2

Place player markers & nodes



SECTION 3

Choose how markers move



SECTION 4

Pick a capture method



SECTION 5

Select a 'win' condition



SECTION 6

Test as many times as needed

Important reminders



KNOW THE RULES

This Game Design Guide requires that you have previously played Gridopolis **and** understand the Original Rules. Use the instruction manual from the game box.

You can also download the instructions – and more free grid-set blueprints – at www.gridopolis.info.



BREAK THE RULES

The examples in each section are suggestions to help you get started.

This game design is your original creation, so **feel free to substitute** any rule or idea you like better!

Just document it in the **Game Design Checklist** on pages 13 & 14.

Introduction



Gridopolis is a 3D strategy game that allows you to get creative and design your own original game!

Using this **Game Design Guide**, you can change the game's design & rules as much (or little) as you choose.

When designing, some unique features of Gridopolis to keep in mind are:

- It's played in three-dimensions, instead of two.
- You can add to or subtract from the grid-set during play!



DESIGN TIP > Wherever you see this green icon, record your idea in the **Game Design Checklist** on pages 13 & 14.

What should I know?

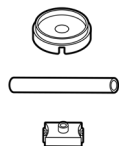


This guide is based on knowledge of Gridopolis and its rules. The best way to learn is to read the instructions and play a few games first!

In each box you get 217 parts:

STRUCTURE (grid-set building)

- 63 Pads
- 16 Posts
- 88 Links



NODES

- 12 Kingerizers (4 colors)
- 6 Teleporters
- 8 Blocker-Boxes



PLAYER PIECES

- 24 Markers (4 colors)

Design process



Designing a game is not a linear process. Your first draft will not be your final design.

As you work through the steps of this Game Design Guide, each decision you make affects other decisions – both before and after.



Be flexible! Feel free to go back and forth in any order with your design ideas.



QUESTION TIME

- What are your favorite games?
- What rules or features do you like most about them?

How many players?



Typical strategy games are played by two to four people.



One box of parts allows for up to four players. Your game design can vary from two to four players.

When deciding the number of players for your game, design the grid-set so all markers have room to move.

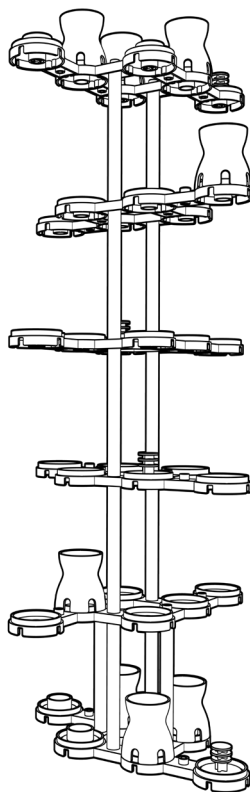


A good ratio of occupied to empty spaces is **40/60**.

That means you should target 40% occupied pads (with markers) and 60% empty pads (for moving around).



DESIGN TIP > Take a few photos from different angles.



< EXAMPLE

This is the Twisted Tower grid-set design.

It's a two-player game with each player getting four markers.

You can download the building instructions, called **blueprints**, at www.gridopolis.info

What's your design?



Since Gridopolis is three-dimensional, start by building multiple levels.

When choosing how **many** levels to build, try to promote movement everywhere.



DESIGN TIP > use an odd number of levels and start players on the middle level.

This creates more action in the center **and** movement throughout the grid-set.

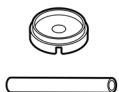
(If players start on the top or bottom level, there will be less movement and gameplay action.)



Should you design a totally flat grid-set, then give each player more structural parts (pads, posts & links) and create a game focused on building!

Any extra parts?

In Gridopolis (Original Rules) each player starts with ten extra parts.



- 3 Pads
- 2 Posts



- 3 Links



- 2 Blocker Boxes

Before gameplay begins, decide how many parts (if any) are given out to players.

If you design a smaller grid-set, then you will have more building parts for players to use during the game.



DESIGN TIP > The ability to add to and subtract from the grid-set makes gameplay more dynamic! (Hint: use the extra parts for building.)

Aim for symmetry



Symmetry is not required, but it will make your grid-set easier to build. Design your grid-set so all players have equal room to move their markers.

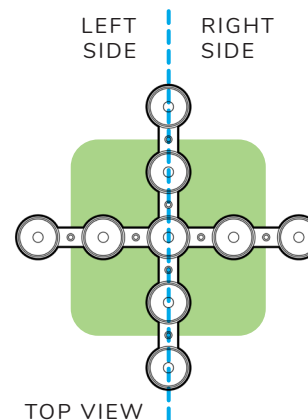
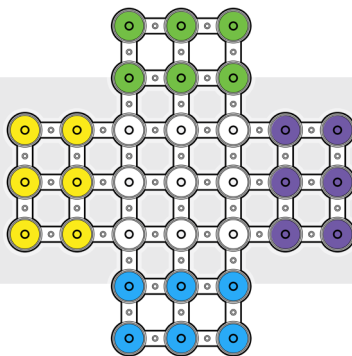


Symmetry helps make things fair. Each player should start an equal distance from a set location – like the center or edge – of the grid-set.

EXAMPLE >

The Matrix four-player design

TOP VIEW



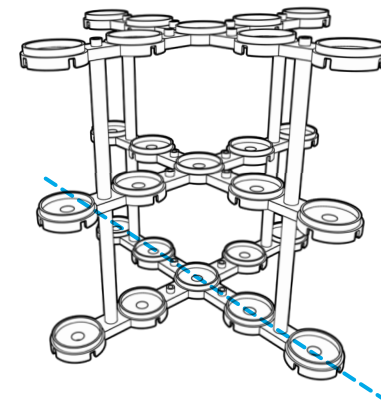
EXAMPLE >

This design is symmetrical because it looks the same on both sides.

(It's also symmetrical in another direction!)

TOP VIEW

PERSPECTIVE VIEW
of the same design





Assign player markers



In Section 1, you selected how many people were going to play. Now, determine how many markers each player will get.

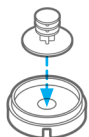
In Gridopolis (Original Rules,) each player has six markers. You can choose any number from 1 to 6.



SUPER TIP > If you own two sets, you can combine them and have up to 12 markers per player. That's double the fun!

Place teleporters

OPTIONAL / SAME AS ORIGINAL RULES



Place teleporters on your new grid-set design. These should be somewhere central, where they are equally spaced from all players. Place two to six.

How do you start?

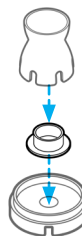


OPTION

Start with your markers **ON** the grid-set (like most games).

Try to arrange markers so that everyone's starting position is an equal distance from each other.

If you use Gridopolis (Original Rules,) place fingerizers on pads underneath the markers. These are your opponent's objectives.



OPTION

Start with your markers **OFF** of the gridset.

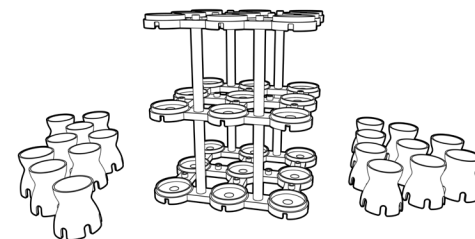
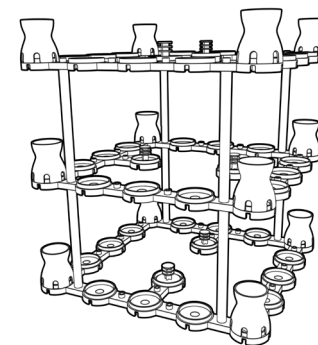
In this case, your first move will be to place a marker on an open pad.



OPTION

Do you have another idea? Great!

This Game Design Guide gives you examples, but feel free to try **anything!** Use the Checklist (pages 13 & 14) to record your choices.



1 pad: no backwards

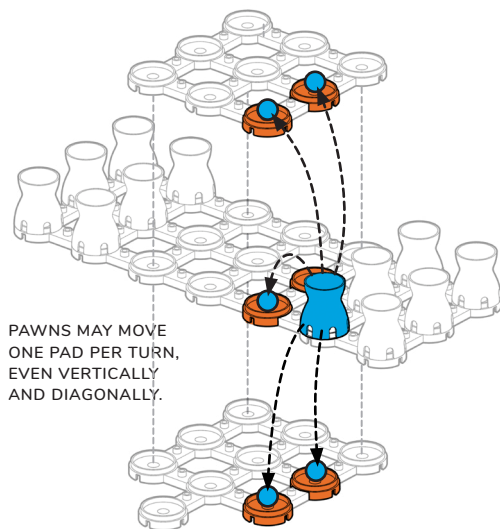
EASY / SAME AS ORIGINAL RULES

A

OPTION

Pawns move one pad per turn as long as they do not go backwards. This includes vertically and diagonally.

This is the same as Gridopolis (Original Rules).



2 pads: straight line

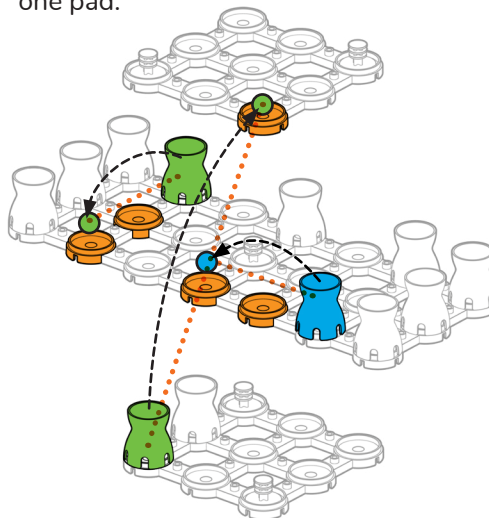
INTERMEDIATE DIFFICULTY

B

OPTION

Pawns move two pads, but only in a straight line. The line can be two pads on the same level, multiple levels, or diagonally.

If you hit 'the end' of the grid-set (the top, bottom or outer edge) then you **are allowed** to stop moving after one pad.



2 pads: mixed move

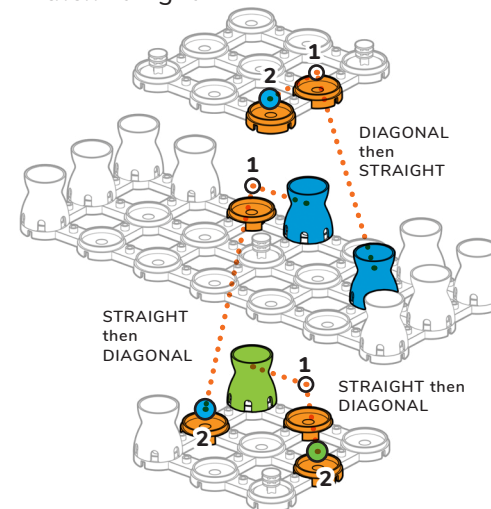
MOST ADVANCED DIFFICULTY

C

OPTION

Pawns move two pads, one **straight** AND one **diagonal**. You can do this in any order.

In other words, you can either move straight **then** diagonal OR diagonal **then** straight.



1 pad (same as pawn)

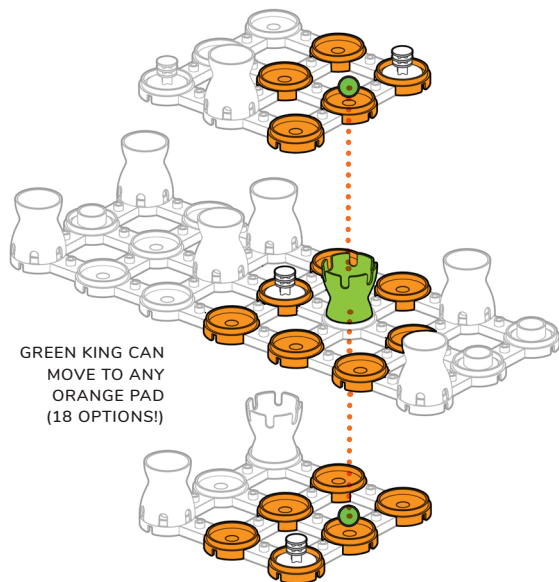
EASY DIFFICULTY

A

With this option, kings have the ability to move in **any** direction.

OPTION

Move only one pad per turn.



2 pads: 90° turn

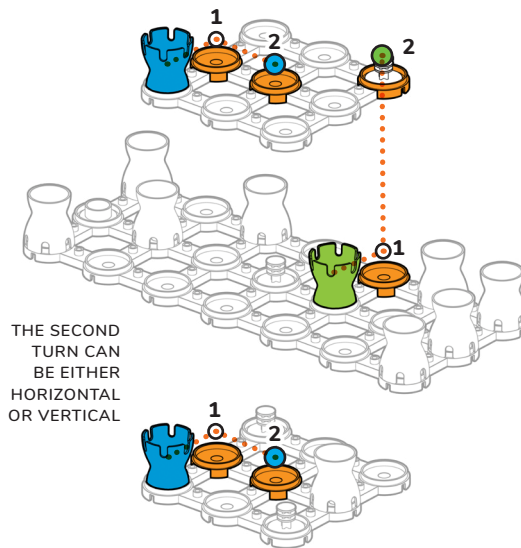
INTERMEDIATE DIFFICULTY

B

Move two pads, but the second move **cannot be** diagonally.

OPTION

The first move is allowed in any direction; the second pad must be at a right (90°) angle from the first.



2 pads: diagonal turn

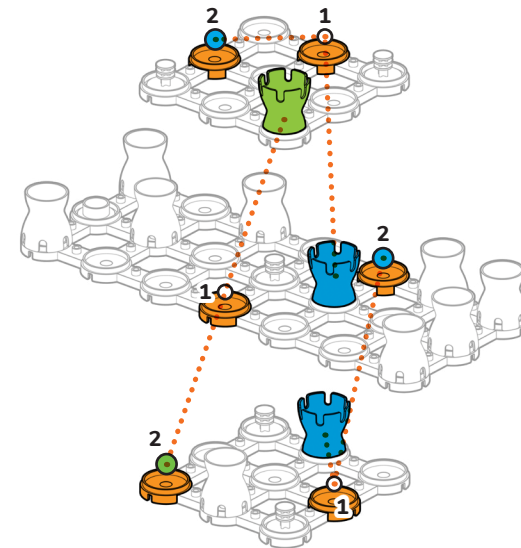
MOST ADVANCED DIFFICULTY

C

Move your marker two pads but **only** in a diagonal direction.

OPTION

The line can be two adjacent pads on the same level, multiple levels, or diagonally across multiple levels.



Jumping capture

EASY / SAME AS ORIGINAL RULES

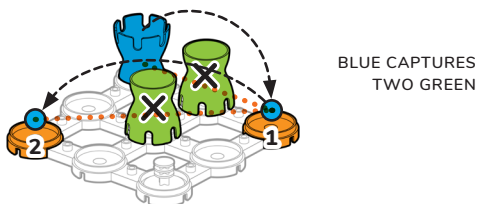
A

OPTION

Jumping over an opponent to capture them is common in strategy games.

It also allows for multiple jump opportunities, and is exactly how gameplay works in both Checkers and Gridopolis (Original Rules).

To capture a marker, you jump over them – **in a straight line** – on to an empty pad.



Landing capture

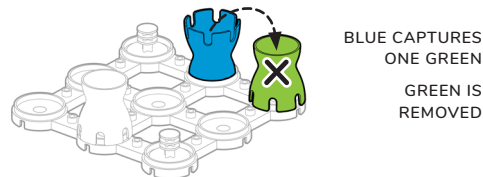
EASY DIFFICULTY

B

OPTION

As in Chess, you capture an opponent by landing on top of them.

In this method, there is no possibility for the multi-jump move.



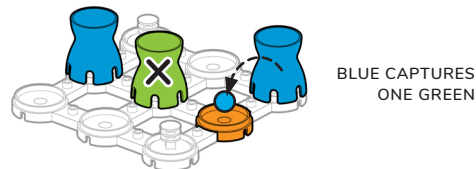
Surrounding capture

INTERMEDIATE DIFFICULTY

C

OPTION

Capturing can also be done by the 'surround' method. You capture your opponent by trapping them between two of your markers.



No capture (it's a race)

DIFFERENT DIFFICULTY

D

OPTION

You don't have to capture opponents to win the game.

As in Chinese Checkers, there is no capturing, only jumping. The game is a race to see who can get their markers to the other side and back again – before anyone else.



In this option, each marker needs to get to their opponent's kingerizer to get kinged. They can then move twice in a row and in any direction (like Gridopolis Original Rules).



They then need to get back to their own original home row. Once there, they exit the game, and are removed from the grid-set.

Finally, decide how many markers need to accomplish the goal. If you start with six markers, maybe only three need to accomplish this goal.

Timed game

I DON'T HAVE ALL DAY, YOU KNOW?

A

OPTION

A timed game is great for classroom use when time is limited or when new players are learning the rules.

You will need to determine a point scoring system to use when time expires.

Here's the Gridopolis scoring system with original rules:

- Kings you captured 4 points
- Pawns you captured 3 points
- Kings you have left 2 points
- Pawns you have left 1 point

You can also create your own scoring system!



DESIGN TIP > Determine your own point system or use the one above.

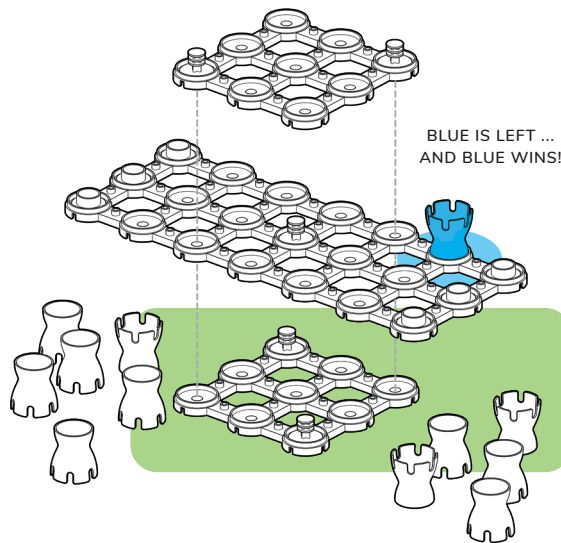
Last player standing

THE TRADITIONAL WAY TO PLAY

B

OPTION

With enough time, the 'last player standing' is a great way to determine a winner. Keep playing until only one player is left in the game.



Grid-blitz!

CAN YOU HANDLE THE PRESSURE?

C

OPTION

Inspired by the high-speed chess style of the same name, you pick a short amount of time for each player to take their turn.

If players cannot decide upon a move in time, they forfeit their move! This makes the strategy shift from **taking the best available move** to **avoiding the worst available move**.

If you don't have a timer, you can use one of the free 'chess-clock or -timer' apps on your mobile device.

Capture the flag

A MORE RELAXING WAY TO PLAY

D

OPTION

Decide upon a specific destination to reach. This can be the opponent's home row (where the kingizers are located) or anywhere else you choose. Then determine how many markers need to reach it.

Play a game!



This sound obvious, but the only way to test a game design is to play it!

First, explain your rules in a logical sequence to help others learn how to play.



DESIGN TIP

If no one is around, try this trick used by the designers of Gridopolis: play against yourself, alternating turns to play as all players in the game!

That works better than you might expect. You can spot obvious problems right away and then fix them before you play-test with others.



DESIGN TIP

Are things not working? Pull it all apart and try again. Trust your intuition!

Best practices



The best way to help others learn a new game is to keep the rules simple and familiar.



Remember, each rule can affect other rules. Play-test enough times to be sure everything works the way you planned.



Always try to avoid a 'stalemate' situation. This happens when two opponents are tied with no clear advantage.

Gridopolis limits this problem by having extra parts to build, using teleporters to move, and giving kings two moves per turn.



Use these ideas or test something new you think works better! When using the Checklist (pages 13 & 14) feel free to use any other ideas.

Share it!



Have you created an amazing new game? Then share it!

The best way to determine if your new game design has potential is to let other people try it out.

To submit your ideas, post your photos and checklist (pages 13 and 14) on social media and tag us using @gridopolis.

[investigate](#)
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[submissions](#)



DESIGN TIP

Use the **Game Design Checklist** on pages 13 & 14 to explain your game design & rules to others.

1

Designing

☐

How many people can play? Choose between 1 and 4.



x3

Take photos of your design at the beginning, middle, and end of a game.

Do you have extra parts? Show in the beginning photo and list below.

2

Starting

☐

How many markers does each player receive? Choose between 1 and 6.

☐

OR

Start **ON** the grid-set
(as shown in SECTION 1 photos).

☐

OR

Start **OFF** the grid-set.

☐

Another (a hybrid) way to start:

3

Moving: pawns

☐

How many pads do you move on each turn?

☐

OR

☐

If you move more than one pad,
Do you go **straight**?

Do you **turn**? If yes, how?

Do pawns have restrictions?

☐

OR

☐

YES. Pawns cannot move backwards, unless they've been 'promoted' to a king.

NO. Pawns can move in any direction at any time.

3

Moving: kings

☐

How many pads do you move on each turn?

☐

OR

☐

If you move more than one pad,
Do you go **straight**?

Do you **turn**? If yes, how?

Do kings get special benefits?

☐

OR

☐

YES. Kings can move twice in a row, in any direction.

NO. Kings move only one pad at a time, but in any direction.

☐

Other details on how kings move:

4

Capturing

PICK ONLY ONE

☐

Jump over your opponent.
As seen in checkers.

OR

☐

Land on top of your opponent.
As seen in chess.

OR

☐

Surround your opponent.
As seen in Othello.

OR

☐

No capturing! Its a race to the finish
line. As seen in Chinese Checkers.

OR

☐

Another way no one has ever
thought of! Specify below.



5

Winning

PICK ONLY ONE

☐

A timed game with points.
Use the scoring system listed below.

- Kings you captured 4 points
- Pawns you captured 3 points
- Kings you have left 2 points
- Pawns you have left 1 point

OR

☐

Another scoring system:

OR

☐

Last player standing.
Winner is the last player left.

OR

☐

Grid Blitz!
A hyper-speed game

OR

NEXT
COLUMN

5

Winning

PICK ONLY ONE

☐

Capture the flag
The first one to complete a course or
the objective listed below wins.

?

Anything else?

List any rules you created that were
not covered in the prior sections.

Our story



Gridopolis is a different kind of game company.

The original, simple idea to make a 3D strategy game has evolved into a robust system of new games **and** game-playing methods.



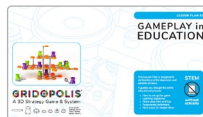
The game that exists today is the result of a three-year design, development, and user testing effort. That effort is still ongoing and will continue.



If you are interested in expanding the use of Gridopolis in a learning environment, please reach out. Write to info@gridopolis.games

Other assets

Buy it now



Get Gridopolis now at www.gridopolis.shop

This Game Design Guide is the second Lesson Plan.

The first Lesson Plan, 'Game Based Learning,' guides use in the classroom and homeschool.

Download the free PDF at www.gridopolis.info



'Gameplay Instructions' is the booklet included with every game of Gridopolis.

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CONTACT

Dave Schultze
Creator | Founder
dave@gridopolis.games



ADDRESS

Gridopolis Games, LLC
28544 Old Town Front St. #305
Temecula, CA 92590 USA