

# GRIDOPOLIS™

Lesson Plan 01 for Educational Gaming



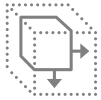
STEM  
without  
SCREENS

Version 020  
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By Dave Schultze



## INTRODUCTION

## The Gridopolis Mission



Our idea is simple; 'Build and Play in 3D.' Why? Educators believe that three dimensions challenge more of your brain!



Gridopolis is designed to be modular and flexible. It can be expanded to a wide variety of game designs, called 'grid-sets.'

This also applies to rules. In future lesson plans, you will be able to invent or modify rules – and create your own entirely original game from scratch!



Gridopolis is a launching pad for a wide variety of games and activities. Go to our website for updates and sign up for free materials like this lesson plan.



## TIME REQUIRED

## 30-90 minutes



Students are organized into a 'play group' of either two or four. Four players can play individually or form two teams.



Should there be an extra (third or fifth) student, they can be the judge, in charge of interpreting the rules and having final say on disagreements.

The time needed can expand for first-time players or the larger groups.



Less time will be needed for those who have previously played or the smaller groups.



## LIST OF

## Required Materials



A single box of Gridopolis has 217 parts, so there are plenty of options for almost any activity!

Items in the box include:



- Instruction booklet
- Seven types of parts
  - Three types for building: the pad, link, and post
  - The markers: your playing pieces that move, jump and capture
  - Three types for modifying a pad: the kingerizer, hyper-pad, and blocker-box



## CATEGORY A

## Therapeutic Objectives

This category includes recreational therapy / special education / occupational therapy / young children / post traumatic injury [TBI] / dementia therapy.



The student will practice recognizing basic shapes, colors and methods of assembly.

Skills that will be addressed



- Shape and color sorting
- Counting
- Turn-taking
- Visual skills
- Visual spatial skills
- Divergent [abstract] thinking
- Selective and sustained attention
- Motor control
- Memory
- Reasoning



## CATEGORY B

## Knowledge Objectives



The student will practice planning, moving, and strategizing in three dimensions.

Skills that will be addressed



- Strategy
- Creativity
- Visualization in 2D and 3D
- Critical thinking
- Logic
- Planning



## CATEGORY C

## Behavioral Objectives



Students will collaborate as they master the rules and play the game, whether individually or on teams.

Skills that will be addressed



- Socialization
- Concentration
- Communication
- Cooperation / Collaboration



Gridopolis is a blank page for your imagination.



ORGANIZE the PLAYERS

## Assign the Teams



The instructor should help select whether the playing group is one of the following options:

- Two players
- Four players
- Four players with two teams of two. [They can sit opposite or next to each other.]



The game length will depend on the number of players and their skill



If time is an issue, play a timed game and track the score. See the instructions for details.



TIME to BUILD!

## Build the Game Grid-Set



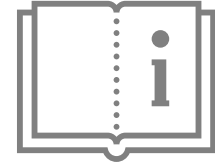
Depending on the group size or the student's skill level, the grid-set is different. Build the correct design.

The orange pads are the fundamental 'building block' of the game system. Start by connecting them to the silver link pieces. Build a whole 'floor' section at once.

Connect four posts to the under-side of the links. Place the kingerizers and hyper-pads as shown in the directions.

Finally, give each player their ten additional building pieces.

And, remember – at any time you can **move** or **build!**



INTRODUCING the GAME

## Explain the Rules



One way to introduce the game is to show a video of others playing. You can also show images of the entire game already constructed.

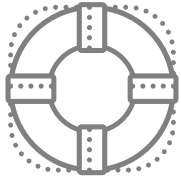


The instructor can also share the 'Quick Start Guide,' a one-page overview. This highlights the basic features quickly and may help some students with the new concepts.



Otherwise, the instructions contain all of the necessary information to build and play in 3D.

The grid-set can increase or decrease in complexity **and** number of rules, depending on the cognitive level of the players.



## GUIDANCE

## Assistance During Game

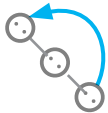


Students who have not played Gridopolis previously may require assistance. It is recommended that the instructor stay nearby to monitor the beginning of a game and offer corrections if needed.



For example, the most common area of confusion is capturing an opponent in three dimensions. The **jumping rule** is always the same, but can be tricky to visualize.

**JUMPING RULE** : for capturing opponents



You must travel a straight line consisting of three points: the starting pad, your opponent, and the landing pad. This can happen on any level or at any angle, but no 90° turns are allowed.



## AFTER THE GAME

## Review and Reflect



After a game is completed, ask students about the experience of playing in a whole new way. Here are some questions to get started:

What are examples of things that have different dimensions?

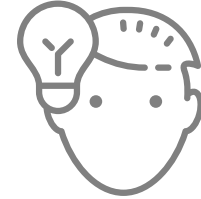
- 1 dimension [line, string]
- 2 dimensions [window, paper]
- 3 dimensions [box, apple, house]



What makes a three-dimensional game more interesting / challenging / fun than a two-dimensional board game?

We live in a three-dimensional world. So, why is it more challenging to play in 3D? Or, is it easier for you? Explain.

# ASSESSMENT OPTIONS



## SOME QUESTIONS

## Brainstorming

After the review session, engage the students to think about games and building in three-dimensional space.

Now that they have played with one grid-set, do they think they could play another grid-set with the same rules? Or, create their own new rules?

Can they think of other ways to re-design the grid-set? Can they draw these ideas or build them?

What games or activities are 2D?  
[Drawing, Etch-A-Sketch]

What games are 3D?  
[Lego, Jenga, K'Nex]

What games are a mixture?





A BEGINNING with NO ENDING

## Our Story

Gridopolis is a new kind of start-up.



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

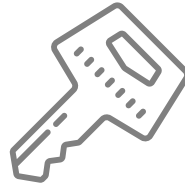


The game you see today is thanks to a two-year effort of design, development, and continuous user testing. That effort is still ongoing and will continue.

If you are interested in participating, we would love to hear from you.



Tell us your ideas for new designs, new rules, or something cool you want to share.



LOOKING AHEAD

## Next Steps for The Grid

This lesson plan covers the very first edition / starter version of Gridopolis. As a system, there are many other ways to use Gridopolis.



New lesson plans and grid-set blueprints are under development. All are free and available as PDF downloads.

Sign up at [www.gridopolis.fun](http://www.gridopolis.fun)

“ Creativity & fun are fuel for learning.”



CONNECT with GRIDOPOLIS

## Get in Touch



### WEBSITE

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