

Inside *Math Game Design*...

Lesson 3: Game Mechanics

Essential Question

What are game mechanics?

How Do You Play the Game?

The answer lies in the mechanics of the game. What are game mechanics? Simply stated, mechanics are what you need to play the game. Mechanics include

- Rules
- Space
- Objects
- Actions

Let's take a look at each game mechanic.

Rules

Rules define a game.

- How players move
- Where they move
- When they move
- The consequence of a move

All of these are defined by the rules of the game.



Rules establish the goal of a game. *The goal is the purpose for playing the game. Some games may have more than one goal.*

Everyone likes to win the game. One of our main goals as a game designer is to communicate the "how to win" part as early and as clearly as possible. This is the "win-state." The written rules should state right up front what it takes to win.

For example, "The first player to get all their pieces off the board wins"

Knowing the "win state" will frame all other rules.

Description

Students learn about game mechanic and consider the type of game mechanics needed for their math game.

Standards Alignment: College and Career Readiness standards for Reading and Writing Literacy in Science and Technical Subjects, grades 6 - 8.

Notes/Lesson Plan

Meet with each IDEA Team. Have students share their game design ideas with you. Encourage collaboration in the team and an understanding of how individual talents are used in the game design process.

Assignments

Game Mechanics Activity

Add Assignment

Downloads

Game Mechanics Worksheet

Game Mechanics

Description

Download the **Game Mechanics Worksheet**. Then follow the directions in the lesson to complete it. This task is an individual activity, not a team activity.

Instructor Note

Students should follow the directions in the lesson to complete the activity. Have students share and discuss their activity sheets.

Question 1:

Upload your **Game Mechanics Worksheet** here.

No file chosen

Game Mechanics

Name of GAME	GOAL of Game	RULES	Change It Up	Game Space and Objects
		Name of Game:	Name of Game:	Name of Game:
			What rule is changed?	
			How does the game play change?	