What does it mean to be a game designer?

So you want to be a game designer? The first step to being a game designer is thinking like one! Game designers see the potential for play in just about everything. Just walking down the street or doing any routine task can feel like a game if you see things through the lens of a game designer. Even the apple you have with lunch can be a game piece!

Game designers have the magical power to dream up playful ways of interacting with everything around them. It’s all about observing, exploring and tinkering, and of course, playing and testing out your creations. When game designers have an idea for a game, they immediately create something playable to test out their idea. They also invite others to play with their creation and to give them feedback.

Game designers rarely design a game without moving through a process of playing, trying, testing, and improving - This is called the Game Design Process.
Now that you know why the design process is important, let’s break it down!

**STEP 1 - BRAINSTORM**
Brainstorming is the first step in the design process. During this phase, game designers ask themselves what kind of game they can make with the materials at hand to meet their design constraints and goals. Often, you might just come up with a few kernels that can be developed into a game and by testing it out, running it by other people, and pushing your creativity, you can come up with something great! It’s important to come up with many ideas during the brainstorming phase - don’t edit yourself and certainly don’t write anything off just yet!

**STEP 2 - PROTOTYPE**
Once you’ve brainstormed a number of ideas, it’s time to select one or two favorites to push forward and start building. Prototyping is all about trying to get your idea on paper in order to create something playable so that you can test out your idea and get feedback. You want to think about which ideas seem the most possible, given the time you want to spend, the materials you have, and the design challenge at hand. Create a sketch of your idea if you’d like, then start to use the materials to build your game. Index cards and post-its are great prototyping tools! It’s ok to change your idea once you start to build it - that’s part of the process.

**STEP 3 - PLAYTEST**
Once you’ve built a playable prototype and tested it and refined it yourself or with your team members, you’re ready to have someone else play to help you determine how to make it the best possible game. Find one or more people to play your game and ask them what they think. It helps if you ask them specific questions about their experience such as:

+ How fun was this game? What did you like about it? What didn’t you like?
+ What suggestions do you have for improving it?

Record some notes so that you can use them later to improve your design. Also - you’ll be able to learn a lot just by watching them play the game. Did they understand the rules? Did they interact with the game in the way you intended? Was anything confusing or overly challenging? What were you surprised by?

**STEP 4 - ITERATE**
Iteration is a fancy word for making changes to your game in order to make it better and more fun. What changes need to be made to your game based on the playtest? How can you improve your game? Using playtester feedback, pick one or two ideas that you think are best for making a change to your game to improve it, then put those changes into action by redesigning your game. You can playtest it again and get more feedback if you want until you feel you are done with it.

**STEP 5 - REFLECT**
Reflection is a key part of the game design process. As game designers, we are constantly evaluating our work and processes and getting feedback from others in order to improve and grow. Think about what you learned during your game design process. It’s helpful to think about what you liked about the process and your game, but more importantly, consider what didn’t go so well and what you would change if you were going to do this again. The game design process is about reframing failure or mistakes as an opportunity to improve.
What makes a game a game?

A true GAME is different from just PLAY. There are qualities that a true game has that are missing in play. This doesn’t mean a game is better than play - it just means it is different. You probably know this already, because you have said “Let’s play a game” - but not “let’s game a play!” So play is part of a game, but you can play something without it having to be a game.

It sounds very obvious, but it’s worth us breaking this down so you can really understand as a game designer what makes a game really a GAME.
Test Your Knowledge!

Can you tell the difference between what is a **GAME** and what is **PLAY**?
Examine the following scenarios. What do you notice?

You are sitting in your chair in class. There is a rubber band around your pencil. You start stretching the rubber band and moving it around your pencil. You start to spin the pencil around, holding the rubber band around your fingers. Is this a game, or just play?

**GAME** or **PLAY**?  [CIRCLE ONE]

How do you know?

Your little sister starts kicking a ball around the hallways of your house. Sometimes she kicks it at a wall, other times she picks it up and throws it to your mother, and eventually, she just sits down and balances the ball on her feet. Is this a game, or just play?

**GAME** or **PLAY**?  [CIRCLE ONE]

How do you know?

You and a friend start to run around the playground. He says that you have to make it around to the slide in 15 seconds, and whoever comes down first wins. Is this a game, or just play?

**GAME** or **PLAY**?  [CIRCLE ONE]

How do you know?
#1 and #2 are both play and COULD become games, but there were some things missing. True games are structured ways to play - this means there are things like winners, goals, and rules. Do they always need to have a winner? Maybe not - but they do have to have some kind of organization to them, whereas play can just be doing something for pure enjoyment. There doesn’t need to be any rules.

**So what is a game? A game is an organized way to play. It has rules, a goal, and a few other things that we will learn about later.**

Games and play can have many similar qualities - both can be fun, both can involve multiple people, both can use materials like balls or dice or any other object. And obviously, you do play a game!
Parts of a Game

The best way to examine what is a game is to look at the parts of a game. Throughout time and across cultures, most games have the same six parts - a goal, a challenge, core mechanics, components, rules and space. The table below explains each part in more detail.

Understanding the parts of a game opens up the world of game design because with this knowledge, you can change one part of a game to create a new game (called modding) or design your own unique game by taking all six parts of a game into account.

Parts of a Game Vocabulary

Goal
What does a player or team have to do to win?

Cross the finish line first, collect the most marbles, be the last standing, etc

Challenge
What obstacles might you put in the player’s way to make reaching the goal fun and interesting?

How is she being kept from doing it? Her leg is tied to her teammate’s, the marble is hidden, getting hit with a ball ends game play, etc

Core Mechanics
What core actions or moves does the player do to power the play of the game?

Jumping, wiggling, searching, solving clues, ducking, bobbing, weaving, dodging

Components
What parts make up the materials of play?

Bandanas? A grassy field, red rubber balls and a court?

Rules
What relationships define what a player can and cannot do in the game?

Players’ legs are tied together, they must start on the same line, all marbles must be gathered waiting 3 minutes, balls can only be thrown outside the line towards the midsection.

Space
Where does the game take place and how does the space affect the game?

Basketball court? A circle? Classroom? The park?
Test Your Knowledge!

What are the Game Parts of ________________?

Before designing games, it is important to practice identifying parts of familiar games. In the example below, the parts of Rock, Paper, Scissors are identified. After you read the example, pick a game you like to play and try to break it down into its six parts.

**Rock, Paper, Scissors**

**GOAL**
The goal is to choose the winning object

**CHALLENGE**
Three different objects exist - rock, paper, scissors - and players do not know what the other player is going to choose as their object.

**CORE MECHANICS**
Players “throw” an object meaning they make the shape of an object with their hand and extend their arm to “throw” it.

**COMPONENTS**
The components are one hand from each player.

**RULES**
Each person throws an object with one hand. Rock (a fist) beats scissors (a v-shape made with index finger and second finger). Scissors beats paper (flat hand). Paper beats rock. Whoever wins gets a point.

**SPACE**
The space is anywhere enough space exists for two people to stand facing each other and extend one arm.

**Name of your game:**

______________________________

**GOAL:**

______________________________

**CHALLENGE:**

______________________________

**CORE MECHANICS:**

______________________________

**COMPONENTS:**

______________________________

**RULES:**

______________________________

**SPACE:**
Lesson 2 - Parts of a Game

What’s this about:
What is a game? It’s often hard to define. A good way to examine what is a game is to look at parts of a game. Throughout time and across cultures, most games have the same six parts – a goal, a challenge, core mechanics, components, rules, and space. Understanding parts of a game opens up the world of game design because with this knowledge, you can change one part of a game to create a new game (called modding) or design your own unique game by taking all six parts of a game into account.

Learning goals:
- Students will be able to identify the parts of a game.
- Students will reflect on why people play games.

Materials needed / space etc:
1. Parts of a Game Vocab sheet
2. Parts of a Game Worksheet
3. Chart paper / board
4. A game you want to play: Select any simple game that students can play easily together based on your context, such as Tic Tac Toe, Simon Says, or Musical Chairs

Time: 30+ mins, depending on what game you choose to play and how many rounds

Steps:
1. Parts of a Game introduction (5-10 mins) Introduce parts of a game using the Parts of a Game Vocab Sheet and write the parts of a game on a chart paper, wall, or screen. If you want to do some scaffolding, go through an example together, such as basketball or tag, or have them give general examples, such as below:

   + **Goal** - What does a player or team have to do to win? Cross the finish line first, collect the most marbles, be the last one standing, etc.
   + **Challenge** - What obstacles might you put in the player’s way to make reaching the goal fun and interesting? How is she being kept from reaching a goal? Her leg is tied to a teammate’s, the marbles are hidden, getting hit with a ball ends game play.
   + **Core Mechanics** - What core actions or moves does the player do to power the play of the game? Jumping, wiggling, searching, solving clues, ducking, bobbing, weaving, dodging.
   + **Components** - What parts make up the materials of play? Bandanas? A grassy field, marbles, red rubber balls and a court? (Note: Players are components of a game)
   + **Rules** - What relationships define what a player can and cannot do in the game? Players’ legs are tied together, they must start on the same line, all marbles must be gathered within 3 minutes, balls can only be thrown outside the line towards the midsection.
   + **Space** - Where does the game take place and how does that space affect the game? Basketball court? A circle? Classroom? The park?
2. Review the rules of the game you selected and have the students PLAY (15 min) Explain the rules of the game to the class, then lead a few rounds of the game.

3. Practice Parts of a Game (5 min) After a brief introduction to the parts of a game, give the students the opportunity to define on their own (or in small groups) the parts of the game they have just played by completing the Parts of a Game Worksheet.

4. Share-out: Parts of a Game (5 min) Once the students have analyzed the parts of the game, have students share out. Keep track of their answers to parts of the game by writing (on board, chart paper, etc)

5. Discuss why people play games (5 min) Once the game and its parts have been collaboratively analyzed, ask:
   + Why do you play games?
   + Why do other people play games?
   + Are games useful in ways other than just “having fun”?
   + Keep track of their responses on a board for easy discussion/reference.

Tips:
   + Remember the difference between components and core mechanics—components are nouns and core mechanics are verbs.
   + Sometimes parts can overlap, so don’t get stuck if something is confusing. Let the students talk it through with you together and decide, is this really a rule, or an obstacle? Or both?

Extensions:
Have students pick another game they enjoy and break it into parts. You can also have them play another game and do this, or teach the class a game. Think about games that are perhaps quite similar, and have them figure out what really makes them different - eg, soccer on a field vs. a foosball table. They can even debate about what would happen if you changed something big - when does the game become a new game, and not just a version of the same game.

Assessment:
Give students an exit ticket with an example of a game and ask them to break it into parts, or make a matching assignment where they have to match part to the game you played earlier. Are students able to correctly identify each part?