

# Play 0.3 – The Game Design Challenge



**This activity will formally introduce the students to the Design Process. The lesson will start with some instructor lead discussion on the different design phases. The students will practice working with the phases while building a game consisting of random objects.**

## **Essential Question**

- How does each step in the game design process allow designers to generate new ideas?

## **Objectives**

- Students will design a game using the **Prototype**, **PlayTest** and **Change** game design process.
- Students will critique games designed by other students and provide meaningful feedback.
- Students will document feedback they receive.



# **The Game Design Process**

**Discuss the different steps in the design process.**

## **Prototype**

The first step is to build a working version of the game. To do this, you need to think about what kind of game you want to make. What will the goals of the game be? Who will play the game?

Now you need to take all of your thoughts and materials and turn them into a playable game. This step requires you to create all the rules and characters, and all the other parts of the game the player will interact with.

## **Play Test**

The next step is to play the game. The designer(s) should invite others to play the game. The designer(s) should ask what the players think about the game, and ask them for any suggestions on how to improve the game. The feedback should be recorded.

## **Change**

The last step is to improve the game based on the suggestions and feedback received from the Play Testing.



In this graphic the prototyping process is broken down into two steps: Thinking and Designing



## Found Objects Game Challenge

**Design a game with common objects found at home or school.**

### Introduction

There are many elements in a game system: rules, goals, story, space, to name a few ... but one of the most fundamental are the materials that comprise the game. Soccer would be a very different game if the ball were extremely heavy, or if the players had to use sticks to hit it.

In this challenge, you'll start a game design from a particular set of components, mostly available around the house or in an office supply store. The components in the kit are chosen for how they can work together, but a broad variety of games are possible with them. What kind of game can you make when you can only use a few objects and what would you make if you

iterated on your design using any materials you want?

## The Challenge

Make a game that can be played by two or more people using only the materials in the kit described below. Discuss how the design springs from and depends on the components used. PlayTest the game and consider how the game could be revised using ‘real’ materials.

## What You Need

- 1 *marker* (such as a Sharpie)
- 3 *paper cups*
- 1 *small sponge cube* – a square cut from a larger kitchen sponge works
- *sticky notes* (a portion of a 1" small stack will do)
- 7 inches of *string*
- *paper/board rectangle* – half of one side of a manilla folder is good
- a *die* – polyhedral is more interesting
- 3 *small binder clips*
- 1 *big binder clip*
- 3 *rubber bands*
- 1 package of a *small candy* – we use a pack of Smarties because they work as a unit or are divisible
- 1 *small ‘better’ candy* – we use a Starburst
- 1 *pointy eraser*
- 1 *sheet of color-coded label stickers* – we use the sheets with circular stickers in four colors (usually red, yellow, green, blue) because these correspond with the paperclips
- 4-6 *multicolor paper clips* – we use a package from Staples that comes with six colors because the colors often correspond to the sticker

colors)

- 1 gallon *ziplock bag*

## **Setup**

Each group will need a kit. The ideal group size is from 3 – 5 students. Break the club into groups and give them each a kit.

## **Phase One: Prototype**

Give the groups 30 minutes to devise a game that can be played using only the materials in the kit. Make sure the groups are focused on making a game that will ultimately be playable and meet the following requirements:

1. Your game must be playable – a set of players must be able to take at least a couple of turns with the materials you have, and you must have a way to win the game.
2. You must write out an introduction to your game which should include the rules of the game.
3. You must give your game a name, even if it's a silly one, because that will call out to your players what the important parts of the game are or what the theme is.
4. Many games are connected to real world situations and experiences. Use the materials to develop a game that addresses an issue or real life scenario that resonates with the students' culture, community and/or prior experiences. We understand this may be a challenge for many students and this goal is optional for earning the bronze and silver badges.

Have groups use the Game Design Document when creating their

game. [Game Design Document](#)

## **Phase Two: Play Test**

Have the groups share their games with the rest of the club. Encourage the different groups to play the other games, and provide feedback to potential problems, improvements, and praise.

## **Phase Three: Change**

Have the students discuss as a design team:

1. Where did the game concept originate? Was it a physical property of the materials, or some relationship between them, or another element of game design?
2. What mechanics did the materials encourage, or make difficult?

At the end of this challenge, each group should have:

1. A completed prototype game design
2. Notes on feedback and what you would next do to iterate on the game
3. Notes on what you would do with the game

## **Game Submission**

Have students submit (*SHARE*) their final game design in the PlayBook. Their submission must include 2-3 paragraphs describing how the game is played, rules, and how to win. The group must also include a picture or short video of the game.

Instructions for SHARING projects in the PlayBook – PlayBook – Share a Project.



## **Earn Badges**

- Students present their game created with found objects.
- Students engage in providing feedback on other student's games.
- Students document the feedback given to them.

All elements are addressed.