



MODULE 4

Make a Game (Any Kind of Game!)

We've practiced the innovative mindset, and we've got the tools to design and print 3D objects. Now let's put it all together and have some fun, by designing a game that involves upcycling. It's entirely up to you to decide what your game is... but the final creation should involve found objects in some way!

Step 1: What's in a game?

How do you like to play? Make a list of experiences you consider fun. Your list can include games you love, but also any other activities that make you happy. Don't hold back! Everyone's idea of fun is different. This is YOUR game.

Some ideas to think about:

- Do you like physical challenges? Or do you prefer mental strategy games?
- Are you more comfortable playing on your own, with your best friend, or with a whole group?
- Inside or outside?
- Do you enjoy playing for long, uninterrupted stretches of time, or in short bursts, before moving onto the next thing?
- Do you like competing? Or would you rather play cooperatively, as part of a team?
- Is there a theme you're especially drawn to? It could be a specific sport or hobby, a period in history, or a fantasy world.

Review the list you've made. Come up with a game idea that incorporates your preferences and fits your idea of fun.

Step 2: Playing by the rules

What are the rules of your game? Who will play it? Do you need a lot of space to move around, or not so much? Is it cooperative, or competitive? Is it timed? Do players score points or solve problems (or both?).

You might want to do some research on games or sports you enjoy to help you come up with guidelines for how to play your game.

Step 3: Gather your materials

What physical pieces will you need to make your game work? Make a list of all the materials required to play.

- Now's your chance to **UPCYCLE!** Identify any found objects that you'd like to incorporate in your game. You've seen in previous modules how 3D design and printing can help you repurpose things so that they can be used in new ways. Think about how you can design 3D parts in Solid Edge to transform what you've found into pieces for your game.
- Need more materials? Now that you're a 3D designer, you can create additional pieces using Solid Edge.

□ Step 4: Prototype

Make a test version of your game and play. Well? How is it? Remember, the design process is iterative—it relies on repetition to get better and better.

How can you change your game in the next version to make it more fun? Does it need to be more challenging or easy? Does it take too long to finish? Are you missing pieces?

Don't be discouraged if you need to go back to earlier steps in the design process and make changes. Every new version of your game will make it more fun!

Home Run!

Share what you've made! Post to social media with the hashtag **#BaseBuildHOF** to be featured on our Hall of Fame page.

We want to see it all—the misprints, the prototypes, and the finished thing: wherever you are in the process.