

**MOONHACK 2020**

# DESIGN THINKING

**WORKSHEET  
ENGLISH**

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# Design Thinking Challenge

You're in charge of creating a unique business to help save the environment! From now on, you're a social entrepreneur!



## INTRODUCTION

### What you will make

You're creating your own social enterprise!

### What you will learn

- Offline design thinking skills
- Communication, collaboration and entrepreneur skills

### What you will need

#### DOWNLOADS

The worksheet for this project is available at [moonhack.com/projects](https://moonhack.com/projects)

This is a great activity to run with friends, your family or as a class.

### Additional notes for educators

Check out our [blog post](https://medium.com/@codeclubau) for this project with tips, curriculum and supporting material at [medium.com/@codeclubau](https://medium.com/@codeclubau)



# 1. INTRODUCTION

- Today as part of Moonhack 2020 you will be creating a unique business to help save the environment. From now on, you are a social entrepreneur, this is just a fancy way of saying that you use business to help make positive social impacts. The activity is designed to be fun and you will need 2 people to help create your unique business.
- Over the next hour you will understand your customer's problem, create solutions and test your prototype. Before you know it you'll have the start of a new social enterprise.
- What you need
  - Printed out worksheets to write on
  - A device to use as a stopwatch
- The challenge question is to create a tool that helps minimise the environmental impact of your household. Now before we start thinking about crazy ways to solve this problem, let's first actually get to understand our customers and the problems they face. For this activity, you will be treating the people you are with as your customer. This means you are designing a business or enterprise that is useful for them.

# 2. EMPATHY INTERVIEW (15 MINS)

- In this activity you will need to get into pairs and take turns interviewing each other.
- This is an empathy interview. The purpose of an empathy interview is to really understand another person's thoughts, feelings, problems and needs so that you can create the perfect product for them. We want your social enterprise to be useful and meaningful to your partner. At the end of this instruction sheet you will find sample questions that will help you with the empathy interview.
- Interview One
  - You will have 8 minutes to ask your partner questions and get their answers. Use a device to time yourself. Once the time is up, they will get 8 minutes to ask you questions. Make sure you write down notes from the interview in the "findings" box on your worksheet.
- When it's your turn to do the interview, you should ask your partner about their concerns for the environment and write down notes about what they say.



#### • Interview Two

After you've interviewed each other you should do the activity again. You can use the second set of sample questions this time and should try to dig a little deeper. You're now trying to really ask them specifically about their problems and what they might already be doing to solve these. This time each partner has five minutes for the interview.

- Remember the questions on the worksheet are just a guide so you can ask any other questions that you think might be helpful

### 3. PROBLEM STATEMENT (5 MINS)



- Now it's time to summarise all of our learnings from the empathy interviews. By this stage you should better understand your customer and the problems they are facing. Take 5 minutes to fill in the work sheet, writing down the most important thing you think your customer needs. Remember we are still focusing on our user's problem and not thinking too much about solutions just yet.

### 4. IDEATION (6 MINS)



- Now that we understand our customer and their needs, it's time to solve their problems. Take 6 minutes to come up with 5 unique sketches of ways in which you can help minimise the environmental impact of your household and solve your customer's issues. This is your opportunity to be creative and save the earth!

### 5. FEEDBACK (3 MINS)



- Now that you have attempted to solve your partners' problems you can show them your solutions and get feedback. This is one of the most important parts of being an entrepreneur, it allows you to change your product to make sure it is perfect for your customer and the earth!

## 6. REDEFINE THE PROBLEM STATEMENT (3 MINS)



- With your new learnings from testing your ideas with your customer, write out your new understanding of what the customers problems are in a new problem statement.

## 7. FINAL PROTOTYPE (5 MINS)

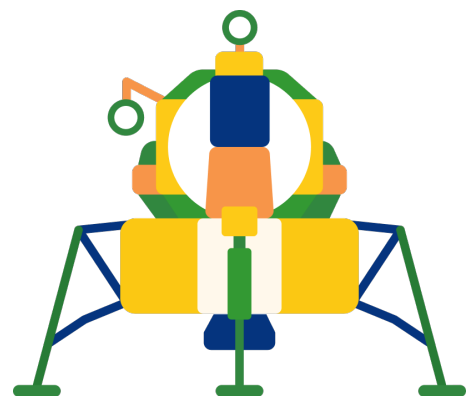


- With all of your learning, conversations and testing it is now time for you to choose one of your ideas which will be the prototype for your business idea. A prototype is the earliest version of your product and allows you to test if it really solves your user's problems.
- Take 5 minutes to create your final prototype, this could involve a drawing, diagram, quick presentation or even a dance! Present your prototype to your partner and if you want to share your pitches with the world, you can record them and upload them.

Congratulations, you have now completed a design thinking exercise, something entrepreneurs around the world use to make the perfect product for their customers. You can use these methods to test any of your future ideas, good luck!

**Congratulations you're a  
Moonhack changemaker!**

**Don't forget to talk to an adult  
about registering your  
participation at  
[moonhack.com](https://moonhack.com)**



## SAMPLE EMPATHY INTERVIEW QUESTIONS

- **Challenge question:** Create a tool that helps minimise the environmental impact of your household

- **Note:** Remember these questions are just a guide, you can ask anything you want to understand your customer! You don't have to ask every question in the list.

- **Set 1**

1. What does environmental impact mean to you?
2. What are your major concerns in the environment?
3. What does your household do which negatively impacts the environment?
4. What's stopping you from improving your impact on the environment?
5. Finish this sentence: I really wish I could reduce my waste by \_\_\_\_\_.

- **Set 2**

1. What is the type of waste that you most want to minimise?
2. What kind of tool may help you minimise waste?
3. If you had \$1000 dollars today to improve your impact on the environment, how would you spend it?
4. Would you prefer a digital or product solution to your problem?

## GLOSSARY

- **Entrepreneur:** A person who starts and sets up a new business.

- **Social Entrepreneur:** A person who starts a business that aims to solve social, environmental or economics problems.

- **Empathy:** The ability to understand and share the feelings of others

- **Prototype:** A prototype is an early model or drawing of your business idea, it is designed to help you test and get feedback on your business.