

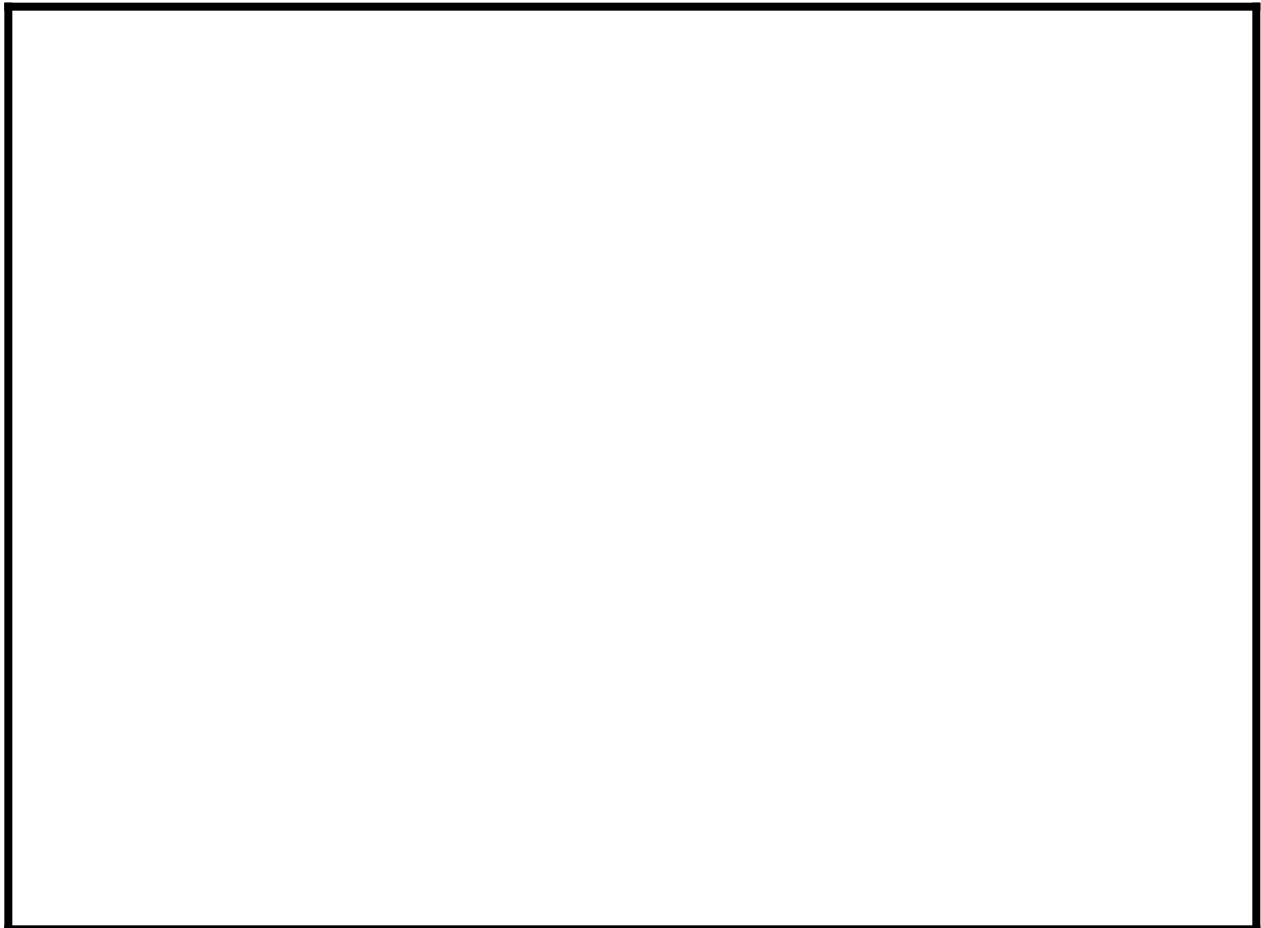
Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

# Factors of Production Project

Task: Think of a need or want people have and design a new invention that will fill it. You will work as engineers to develop, market, and pitch your creation. Make sure to do your research! For instance, if you are designing new shoes, it will be essential to understand the structure of your feet and research the functions a shoe provides for different activities.

## Task One: Product Research- Brainstorming

Directions: In the space below, brainstorm different types of inventions you could design.

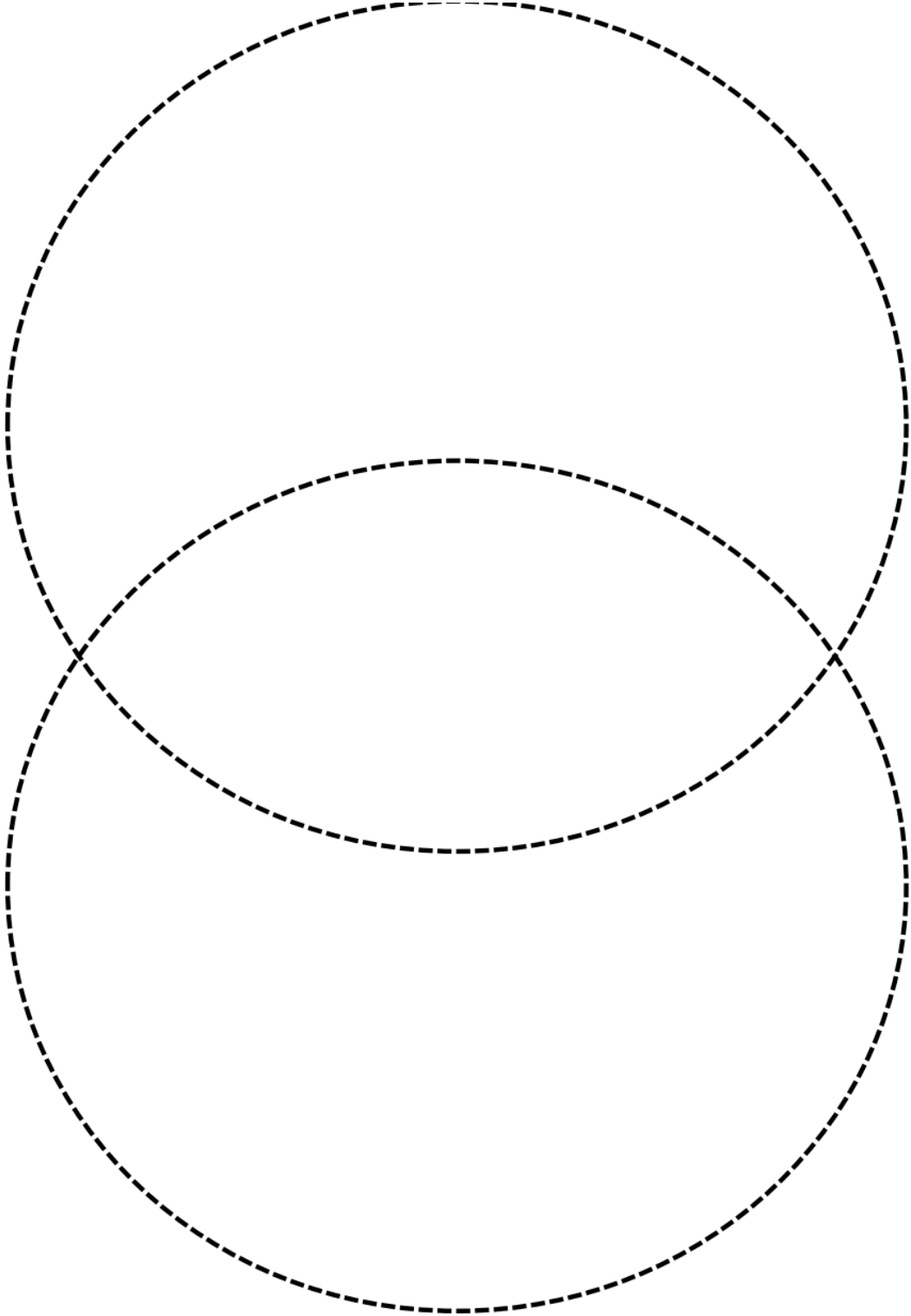
A large, empty rectangular box with a thick black border, intended for students to brainstorm and write down their ideas for inventions.

## **Task Two: Product Research**

Directions: Answer the following questions based on your invention.

1. Detailed description of your invention. Include the name.
2. Is your invention a good or a service? Why is your invention better than products currently available?
3. Detailed description of customer your invention will be marketed towards.
4. What laws and regulations will you need to follow for your invention to be produced and sold?
5. What is the pricing of your competitors who have a similar product?
6. How do you plan on marketing your product and where do you plan to sell your product? If you plan to market you product on tv or billboards look up the cost.

**Task Three: Compare your product to a similar product already for sale.**



**Task Four: Factors of Production for your Product**

<p><b>Land</b> <b>(natural resources)</b></p>	<p><b>Human Capital</b> <b>(skills and workers)</b></p>
<p><b>Capital Goods</b> <b>(tools and technology)</b></p>	<p><b>Entrepreneur</b></p>

## **Task Five: Product Design- Design Possible Prototypes with Unique Logo**

\*A prototype is an example of what your product will look like. You will have to also create a physical or digital prototype to show the class.


## **Task Six: Cost Analysis**

Directions: Determine how much it will cost to produce one of your products. Land+human capital+capital goods

**Total Cost:** \_\_\_\_\_

## Task Seven: Manufacturing & Retail

SUPPLY & DEMAND: Now that you know how much it will cost to make your invention, decide how many you want to create. If you make too few, you will run out. If you make too many, you will lose money and possibly go out of business. How many people do you want to purchase your invention?

In the first 1 month of business our team would like to make \_\_\_\_\_ of my invention.

1. How will you reflect on your 1 month production and change your production throughout your first year? (3-5 sentences)

## Task Eight: Pricing

Directions: The goal of any business is to make a profit, or income. To calculate the profit, you must do some math! Remember that your cost should be affordable for consumers, but also high enough so that you earn money!

### Calculate:

Selling price of invention..... = \_\_\_\_\_

Total cost of production..... = \_\_\_\_\_

Profits..... = \_\_\_\_\_

## **Task Nine: Investment Plan**

To start your business, you will need investors to loan you money to get the business going!

1. To decide how much money you will need, look back at how many \_\_\_\_\_ (invention) did you want to produce in month 1 of your business?
2. Based on this number, how many would you produce by the end of month 4?
3. How much did each one of your inventions cost? (Production Cost)?
4. How much do you estimate you will spend on marketing your invention? (Do some research)
5. Now calculate how much money you will need to make a four month supply of your product.
  - \* Make sure to add marketing cost to production cost before multiplying by the # of you invention that will be made by month 4.

## **Task 10: Final Presentation**

Directions: Now that you know how much money you will need to get started you will have to create a presentation to persuade investors to lend you the money. Your presentation can be on prezzi, Google Slides, etc.

\*Make sure you also have a prototype of your invention\*

**To persuade investors, make sure to include:**

- **Evidence of research and pictures, charts, diagrams that shows the want/need or demand for your product.**