



LAUNCH NOTEBOOK

DESIGN CHALLENGES

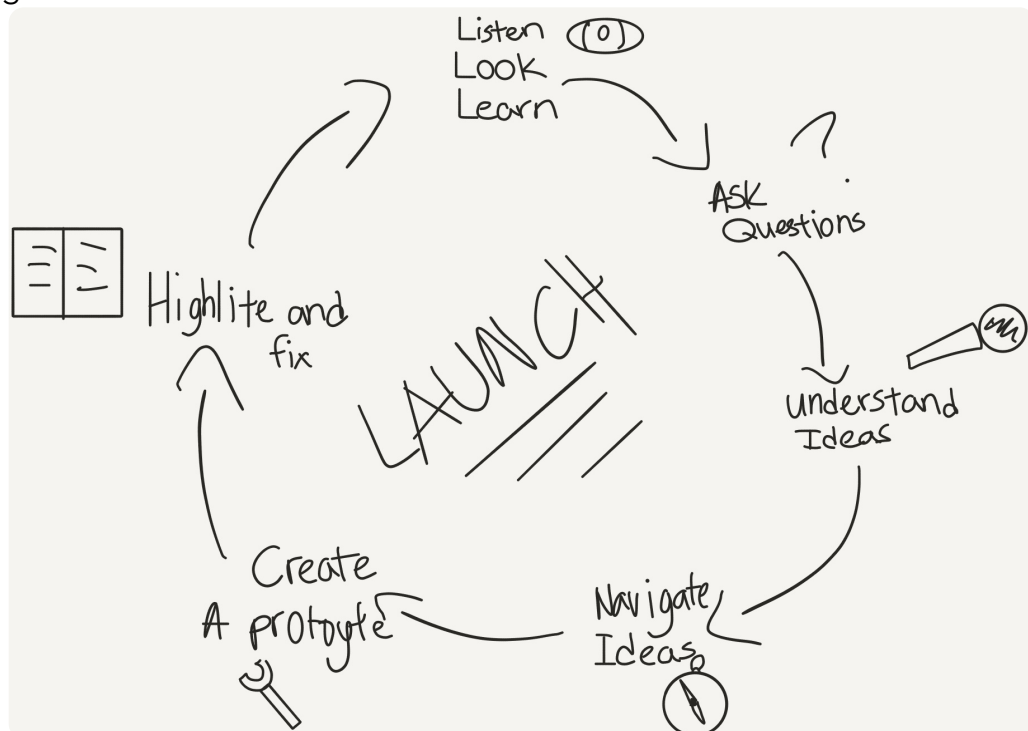
You're going to make something amazing and you're going to start on it today. It's going to be something that has never existed before in the history of humanity.

You know how you typically turn in an assignment to your teacher and then you get it back and, well, that's pretty much it. This is different. Working with your design team, you're going to create something people will actually use!

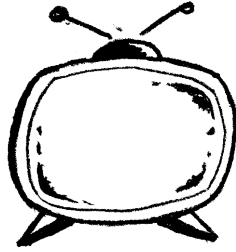
THE LAUNCH PROCESS

Look all around you. Seriously. Glance around your classroom. You are surrounded by things that people created. Not only did they create these things but they also designed them. The fancy term for this is design thinking. It's the term professionals use. You're going to use the LAUNCH Process. It's a modified version of the design thinking cycle that artists and engineers use in the real world. Here's how it works:

Insert diagram here



PHASE ONE:
LOOK, LISTEN, AND LEARN



LOOK AT THE CHALLENGE

Watch the video and listen closely to the challenge.

You just received a mystery box. Inside, you find a roll of duct tape, two tennis rackets, a whiffle ball, a stack of cups, a bag of balloons, and a spool of string.

*Now, invent a sport using **at least four** of these items.*

What is the goal of your sport? How will you win? Will you have points? Will you take turns? Will it be timed or will it end when you've reached a final score or a destination? How many players will you need? Will it be a team sport or an individual sport? Or will the sport have multiple teams playing against each other? What positions will it have? And what will the players do? What will the rules be? What will be allowed and forbidden? What will happen if an athlete breaks the rules? What kind of a court or a field will you play on? What will the dimensions be? Will you play it indoors or outdoors?

Now work in a team to invent this sport. It needs to be the kind of sport that your classmates will actually want to play.

Feel overwhelmed?

Don't worry. You're going to go through the entire design process with your LAUNCH team. By the time you're finished, your sport is going to be awesome!



INVESTIGATE THE CHALLENGE

After watching the video, jot down some observations. This could be anything you notice about this project. It could be ideas of what you'd want to create, details that stuck out to you, etc.

OBSERVATIONS	QUESTIONS
<p>Make a net, use the whiffle ball as the main ball. Use the rackets to try to hit the ball into the cups. It's basically beer pong but with rackets and a net. Put duck tape on the cups so the ball can get stuck on the cup since the ball wont fit in the cup.</p> <p>Duck tape to make a court. The strings can make a net. The cups can be the targets and you're trying to hit each other's cup with the whiffle ball. You will use the rackets to hit the whiffle ball. Each cup you hit, you get 1 point. If you knock your own cup over, you lose one point but your opponents doesn't get a point. If you are at zero, you get to -1. Whoever gets to +10 first wins. The point restarts when someone knocks over the cup. There will be four cups on each player's side.</p>	



MEET WITH YOUR LAUNCH TEAMS

LISTEN TO YOUR AUDIENCE

You are going to create this sport for your classmates. You need to create a sport that your classmates *will actually* want to play. So, try and keep that in mind as much as possible when you start planning things out.



CREATE A SURVEY

You want to make sure you know what your audience wants, right? So, how do you figure out this out? How do you go beyond assumptions to figure out their thoughts on the type of sports they like to play?

One of the options is a survey. So, working as a team, you will create a survey for your classmates.

Think about the types of questions you want to ask. What do you need to know about your audience before you create a sport for them?

STEP ONE: GENERATE QUESTIONS

As a group, create a list of questions you would like to ask your audience. Feel free to use the sentence stems on the right if you are struggling with what to

ask. Each member should have each question listed in his or her interactive notebook.

SURVEY QUESTIONS	SENTENCE STEMS
<p>1. What's your favourite sport?</p>	<ul style="list-style-type: none">• What is your favorite / least favorite _____?• When was the last time _____?• How do you feel about _____?• How often do you _____?• Why would _____?
<p>2. How much are you athletically active per week. How many hours?</p>	
<p>3. Do you prefer Team or individual sports?</p>	
<p>4. Do you prefer indoor or outdoor sports?</p>	

STEP TWO: DIVIDE UP YOUR QUESTIONS

Next, divide up the questions so that each student gets one question. This will be your individual question.

My question is: Do you prefer a team or a individual sport?

STEP THREE: MAKE IT A MULTIPLE CHOICE QUESTION

Individually, turn your survey questions it into a multiple choice survey question. Your survey question should at least have five options. Please use the table below:

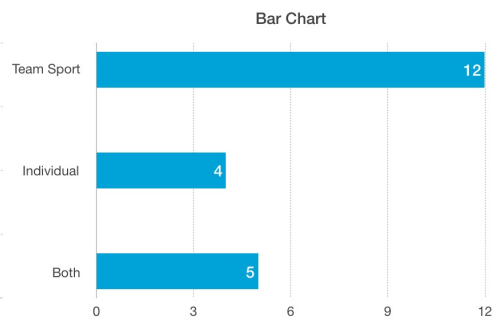
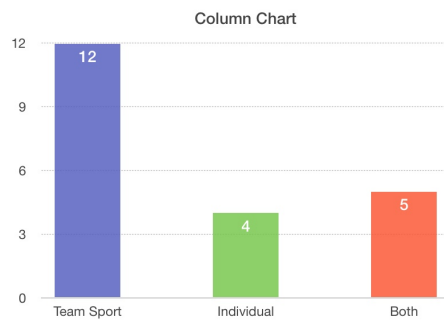
SURVEY QUESTION:	
Do you prefer a team sport or individual sport?	
OPTION 1: Team sport	
OPTION 2: Individual sports	
OPTION 3: A sport that has both (example, tennis)	
OPTION 4:	
OPTION 5:	

STEP FOUR

Create a bar graph or a circle graph showing your results. Draw it out below:

Do you prefer team or individual sports?

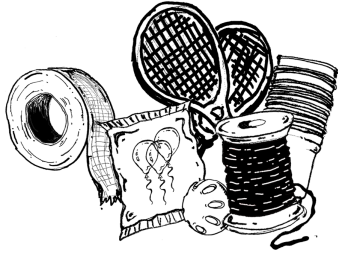
TYPE OF SPORT	VOTES
Team Sport	12
Individual	4
Both	5



STEP FIVE

Share your results with your design team. What trends do you notice? What will that mean in terms of creating an engaging sport?

Team sports absolutely killed it with 12 votes. Which means everyone likes a team. This will mean that creating a team sport will get more people's attention.



LEARN MORE ABOUT YOUR ITEMS

Take some time to explore your items. You don't need to write anything here. Just play around with them. What are some of the possibilities that you see? What are some things that might come in handy?

Note: This is optional space where you can add any observations, notes, or ideas of how you might want to use these items in a sport. You might draw a picture, make a web, or make a list.

PHASE TWO:
ASK QUESTIONS

ASK QUESTIONS

Individual: Now that you have a clear picture of both the design challenge and your audience, you're going to create a set of questions you need to ask before planning out your sport.

Think about it this way:

What kinds of questions would someone have about your game? Think about all the questions that they will need to know? (i.e. What are the rules? What are the roles?)

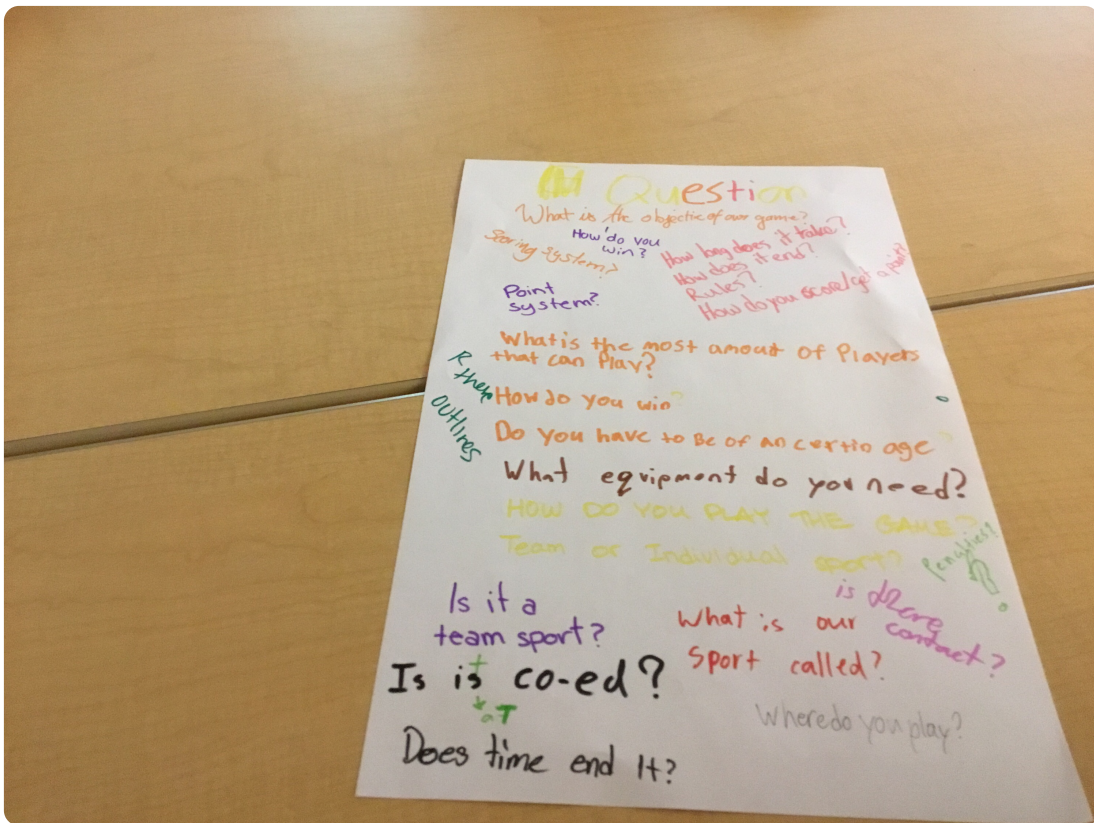
List your questions below:

1. How does the scoring work?
2. How long is each game?
3. How do I win a point?
4. Team or individual sport?
5. How to play the game?



MEET WITH YOUR LAUNCH TEAMS

As a team, go round-robin and share your questions. As you add your questions to chart paper, individually add any additional questions that your group came up with below:



PHASE THREE:
UNDERSTAND THE PROBLEM OR PROCESS



MEET WITH YOUR LAUNCH TEAMS

So, here's the problem: You need to create a sport that your classmates would actually want to play. Try and keep that in mind as much as possible when you go start planning things out. This is why you're going to do some research! Go online and research examples of sports. What makes these sports boring or exciting for your peers? Use the chart below to record your results.

SPORT	BORING	EXCITING
Tennis	When both players can't hit or if the rally goes on for too long.	When two really good player plays and wins amazing points.
Soccer	Boring to watch if no one	The World Cup or when the two teams are very competitive and score lots of goals.
Basketball	When one team is leading by way too much.	A very close and competitive match.
Skiing	Skiing green runs or when you see slow skiing only.	Moguls and jumps. Or watching big air.
Baseball	When no team can hit.	When one team goes on a streak. Or home runs.

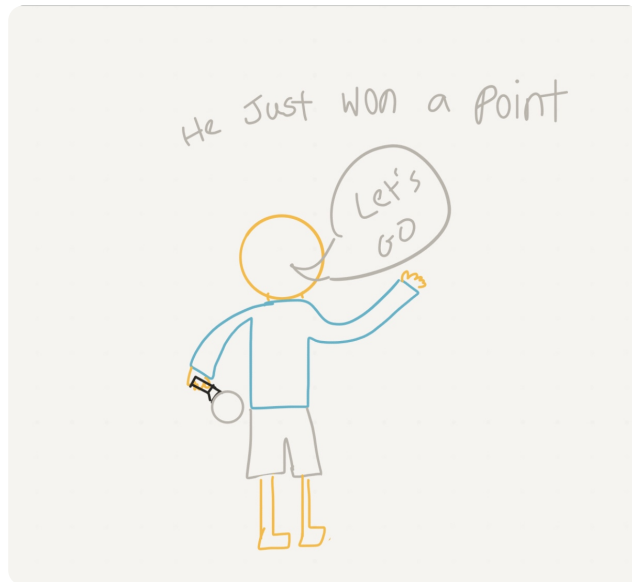


A FULLY ENGAGED ATHLETE

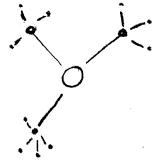
Individual:

Option 1: Draw and label picture of an athlete who is fully engaged in a sport. Use symbols to represent what this athlete is thinking or feeling (i.e. a trophy to represent winning or a heart to represent a love of the game).

Option 2: Describe what a person should be feeling and thinking when fully engaged in a sport.



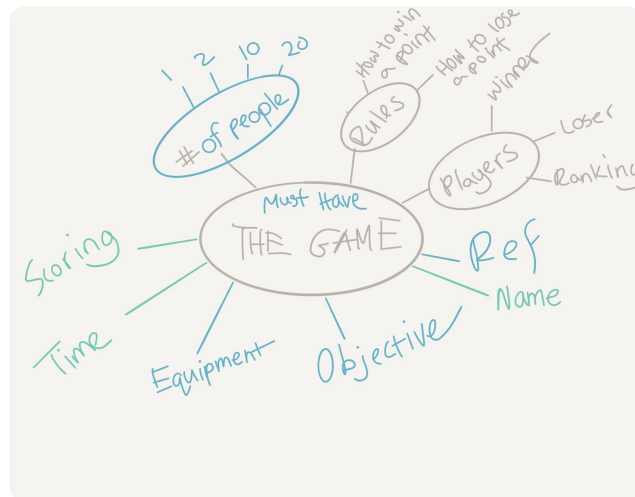
PHASE FOUR:
NAVIGATE THE IDEAS



CREATE A WEB

Individual:

Take your list of questions that someone playing the game would have. Now create a web showing all the things that a sport must have (a clear winner and loser, players, etc.)





MEET WITH YOUR LAUNCH TEAMS

Create your list of criteria for all sports. Use the questions from Phase Two to guide this process. Add your criteria on the left and questions to the right. Don't worry about the "our sport" category just yet. You'll get to it soon.

Criteria	Questions	Our Sport
<i>Players</i>	<i>What do the players do? What positions do they have? How many players do you have?</i>	
Scoring System	How do I win points, how do I lose points?	
Rules	Is there a ref, are there fouls, what are the fouls, can I get suspended. How do I win, how do I lose, how do I know if the game has ended, can I get disqualified?	
Time	How long is the game, is there a halftime, are there quarters?	
Team	Individual or a team sport?	

INDIVIDUAL

Brainstorm a list of four possible ideas of a sport you could play with the items that you have. Give a short description of each one.

1. Soccer Tennis. We have to get the ball into the other person's net. We hit the ball with the racket. You get a point every time you hit it into the other's net.
2. Mini Tennis. We make a net out of the cups, make a mini tennis court and play.
3. Hit the cups. You are trying to hit the other person's cup with the ball.
- 4.



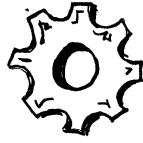
LAUNCH TEAM: BRAINSTORM

Share your ideas in one larger brainstorm. This could be a list or a web on chart paper. Make sure each group member gets a chance to add ideas.

CREATE YOUR CONCEPT:

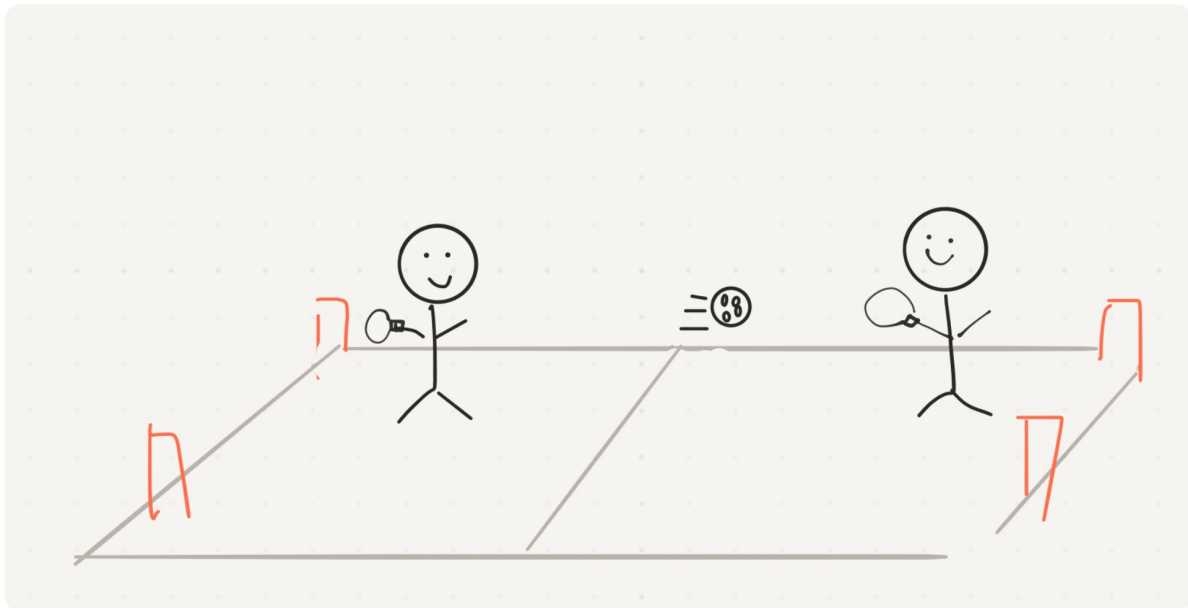
Next, work together to take the best ideas from each person and create one game.

PHASE FOUR:
NAVIGATE THE IDEAS



INDIVIDUAL SKETCH

Draw a diagram of how your sport works. Make sure to annotate it (write descriptions of what's happening). You might want to draw out multiple diagrams to help it make sense.





MEET WITH YOUR LAUNCH TEAMS

Create it! Use your supplies to see if you can make it. Write any notes of observations you see.

If you knock over the cup and the ball goes over the tape, you will get a point. We need to fix the stopping of play. It happened too often. The ref throws it in, it can be in the middle or on someone's side. You may not hit the ball over the waist. You may not hit a overhand and only have two touches to hit the ball. The ball can be on your side for only 3 seconds. We are not really to launch yet. We need to fix some problems like not getting the other person hurt.

PHASE SIX:
HIGHLIGHT WHAT'S WORKING AND FIX
WHAT'S FAILING



MEET WITH YOUR LAUNCH TEAMS

Spend some time playing the game.

Jot down what's working and not working:

Stages	What's Working	What Needs to be Improved
<i>Example: Stage 1</i>	<i>It's exciting and there is a lot of scoring</i>	<i>It's way too easy to score and too many people are just standing around.</i>

PHASE SEVEN:
LAUNCH IT!



MEET WITH YOUR LAUNCH TEAMS

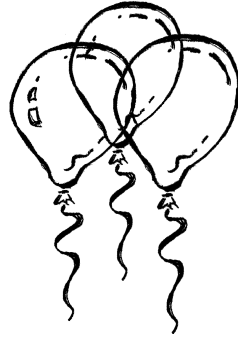
LAUNCH IT!

Now that you have finished with the sport, you will launch the sport to your classmates.

Option 1: Create a list of instructions showing how the sport is played.

Option 2: Create a list of instructions with pictures showing how the sport is played.

Option 3: Create a video showing how to play the sport you invented.



CELEBRATE WHAT YOU LEARNED!

INDIVIDUAL: SELF-REFLECTION QUESTIONS

1. What did you learn from this experience? Would you want to do this again?

I learnt that teamwork is a very important skill that is needed when it comes down to this challenge. I learnt that you always want to listen to other's ideas and not just your own. Overall, I think it was fun and I would do it again.

2. How well did you work with your group?

I felt like I did pretty well working with my group. I listen to other's ideas and contribute ideas as well.

3. What were some creative risks that you took?

I took risks such as leaving out the materials such as balloons but you never know if your gonna need them. I didn't really take big risks, it was more like a teamwork thing.

4. Which phase in the LAUNCH Cycle was the best for you and why?

The best part for me was probably the highlight and fix part. I knew what to fix right after we tried our game.