Welcome to Fluxspace!

Warm Up: Design Challenges

Ping Pong Tower Challenge

15:00

- 1. Build the tallest tower that can hold a ping pong ball.
 - o Official measurement is from the table to the bottom of the ping pong ball.
 - Your tower must be freestanding.
- 2. Each team has the same materials.
 - Use only the materials at your tables. No refills.
 - You do not need to use all the materials.
 - Do not break reusable materials (K'NEX, scissors, ping pong ball).
- 3. Each team gets 2 official measurements.
 - Try a safe design, raise your hand to get a measurement, and see how you do.
 - Then try a wacky riskier design to build an even taller tower.

Wind Tunnel Challenge

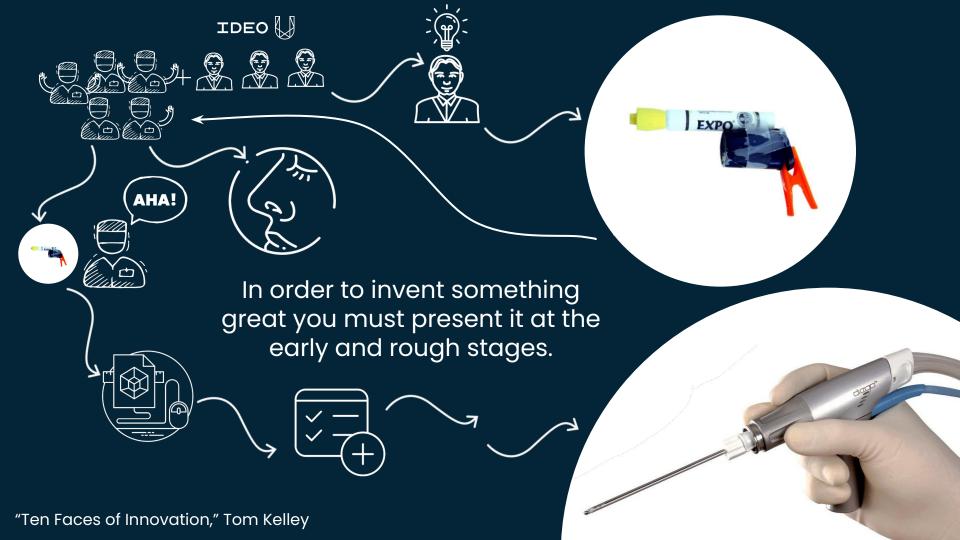
15:00

- Float a ping pong in the air for as long as possible, without dropping it.
 - Official time is from the moment you let go to when it lands.
- 2. Each team has the same materials.
 - Use only the materials at your tables. No refills.
 - You do not need to use all the materials.
 - o Do not break reusable materials (K'NEX, scissors, ping pong ball).
- 3. Each team gets 2 official measurements.
 - Try a safe design, test your design, and see how slow it flies.
 - Make improvements and changes to make your design slower.

Clean Up!

What is a prototype?

A prototype is a model of a product, built to test an idea or invention.











What's the solution?













There are an infinite number of ways to solve a situation.

What is Design Thinking?

Design Thinking is a process for creative problem solving.



Design Thinking



Engineering



Entrepreneurship

DIVERGE VOU DODGETT On consider every potential solution Notion down to just one problem **DISCOVER DEVELOP DEFINE DELIVER**



Invent something to help a firefighter.

DISCOVER

What do firefighters do?

What do firefighters need to be good at their jobs?

What problems do firefighters deal with?

What's a problem that a specific type of person deals with?

DEFINE

Ideation (Brainstorming)

DEVELOP



Quantity Over Quality
No Bad Ideas
Combining Ideas = New Invention

Ideation (Brainstorming)

DEVELOP

Combine ideas or select your best idea, and draw a sketch.





DELIVER

30:00



DELIVER

Invent something to help a firefighter.

Consumables: Return to the bins & throw away small scraps.

Building Materials: Return to the bins.

Tools: Return to the wall.

Reflection

Select one of the following questions, write an answer on a post it, and put it on the board.

- What was something you learned today?
- What was something frustrating about today?
- ? What questions do you have after today?

Thanks for visiting Fluxspace!