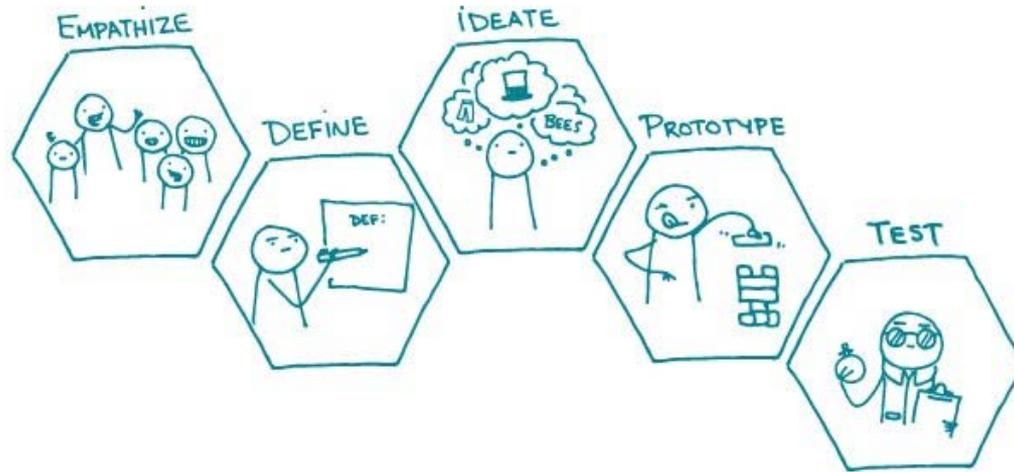


Welcome to the STEM lab

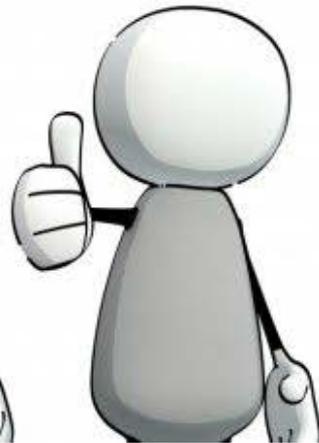
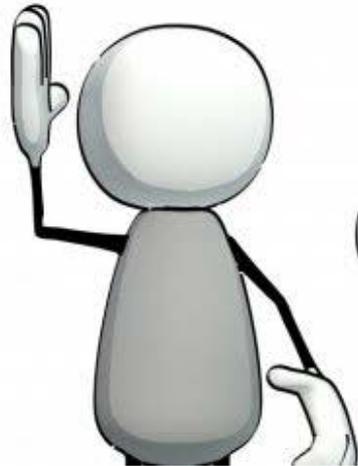
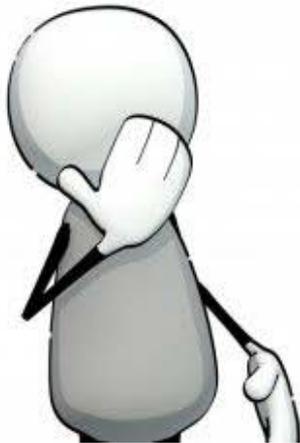
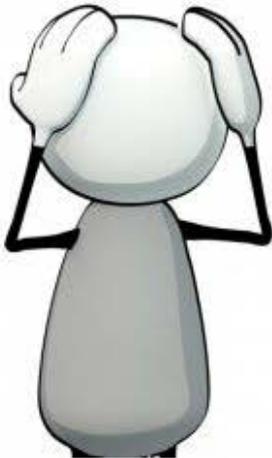
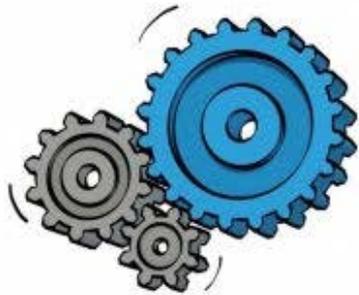
Design Thinking

DESIGN THINKING!



Design thinking- What is it?

<https://www.youtube.com/watch?v=LhQW-HQwYTk>



Background Knowledge for Students

Names and location of the planets and the Sun

Understanding of what a space mission is

Understanding of why humans go on a space mission

Understanding of different teams involved in a space mission and description of their roles

Understanding of how teams from the Space station and mission center on earth communicate with each other and how it helps them to achieve the mission

<http://www.challengerillinois.org/rendezvous-with-a-comet-teachers-guide/>

Design Thinking Challenge

Students would be using their background knowledge (refer previous slide) to

Design a game for students of grade 1 and 2 students to play during indoor recess and to use as a learning tool.

Journey of Design Thinking

Use the worksheet named, '[Design a game for 1st and 2nd graders](#)' (attached as a separate document) provided to travel through the process of Design Thinking

Reflection on your work

Now that you have experience with the process of Design Thinking, reflect on the following questions.

1. What game did you design and build? How did the first and second graders react when you donated it to their classes?
2. How did you feel when you watched them play the games you built?
3. How many times you redesigned your prototype and improvised it? Why did you do so?
4. What role did you play as a 'mistake mechanic'?
5. What role did you play as a 'success strategist'?

What does 'mistake mechanic' mean?

'Mistake mechanic' is a term I came across in the book, '*The Growth Mindset Coach*' by Annie Brock and Heather Hundley. This refers to the attitude one has to possess when they see that their work is not working as intended. The person in-charge possess this attitude and ask themselves the following questions and work upon them.

What is wrong with my work?

Why did this happen? (or) what could be the cause?

How can I rectify it?

Where can I take help from?

What does 'success strategist' mean?

This is the term I made up for my class.

If the student sees that their work is well in sync with the intentions, they proceed and improve upon by using the following reflection questions.

1. Wow! Mine works well. What made it work well?
2. What more could I do to make it better in terms of its cost, in terms of its appearance and so on?
3. If I have to make a version 2, what will it look like? Why do I say so?