Play is our brain s favorite way of learning
Diane Ackerman

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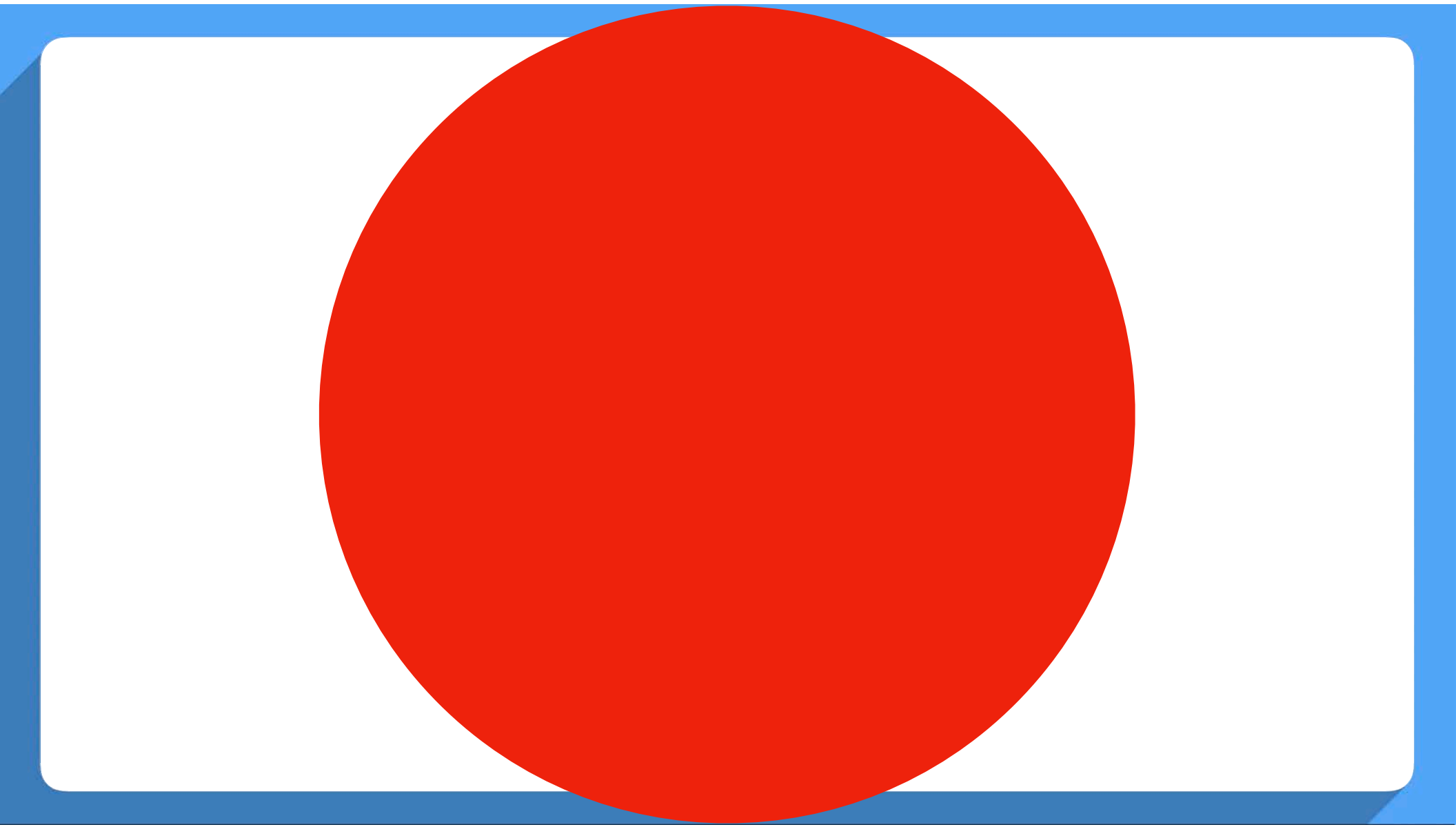

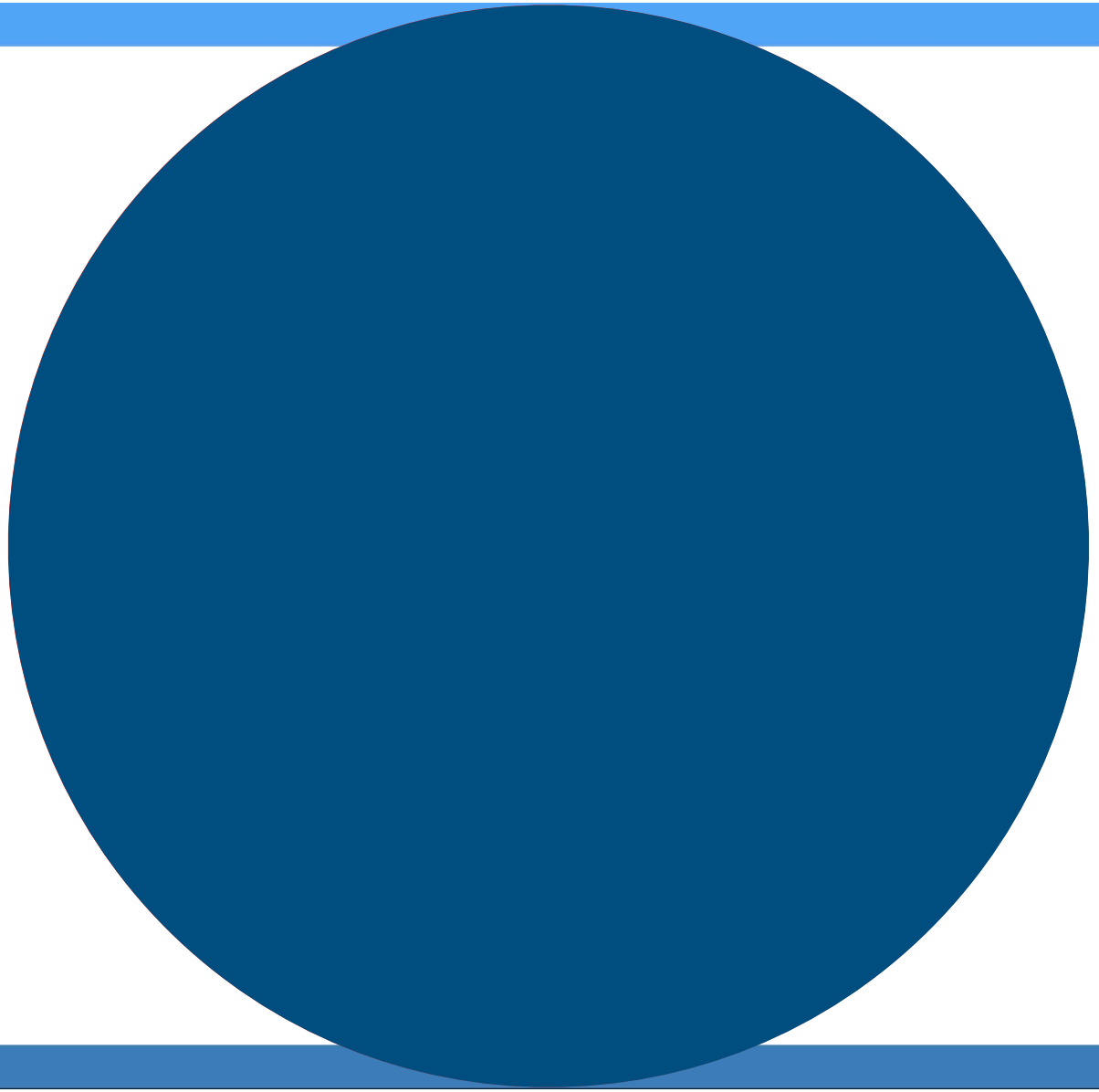

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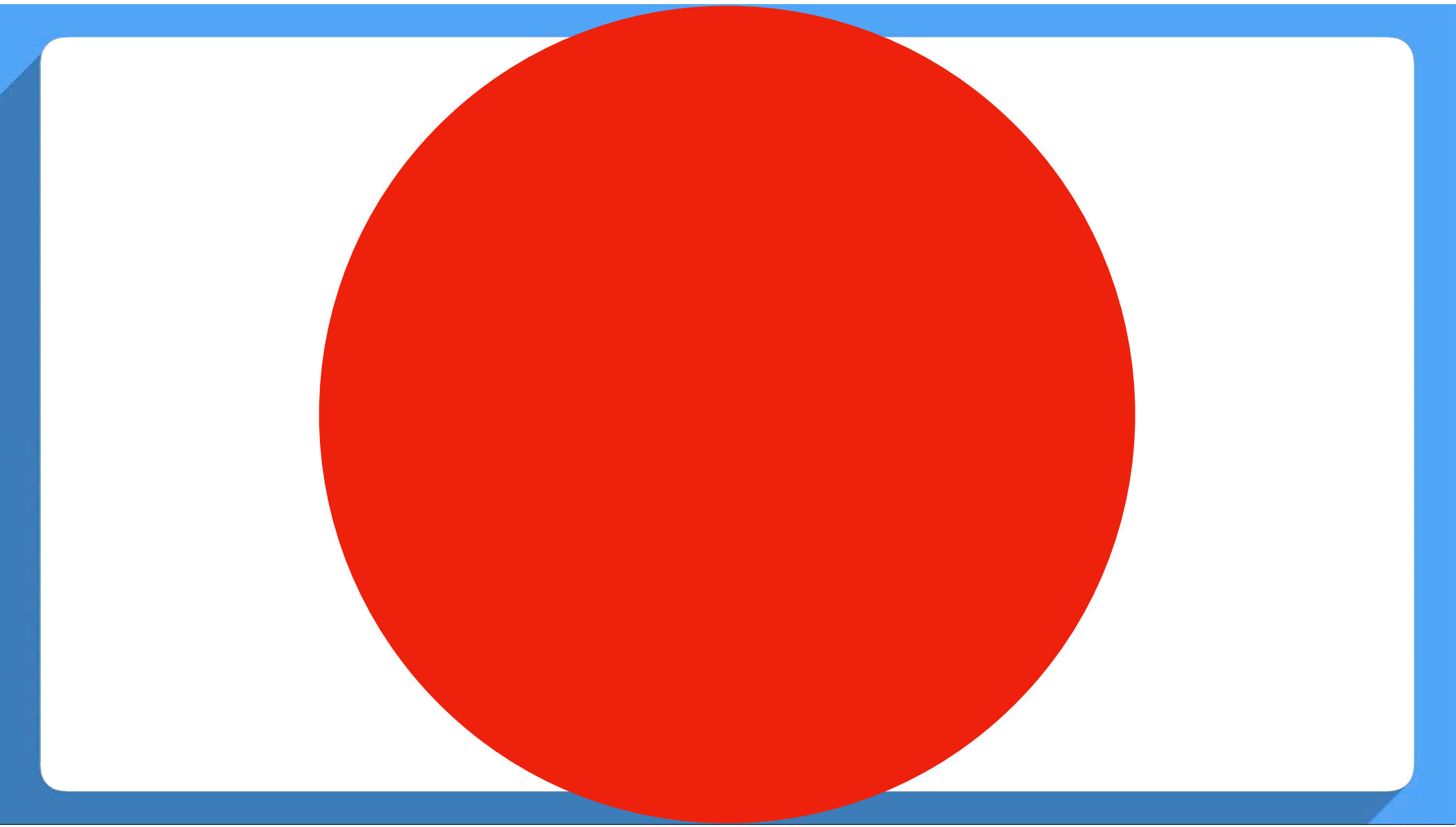

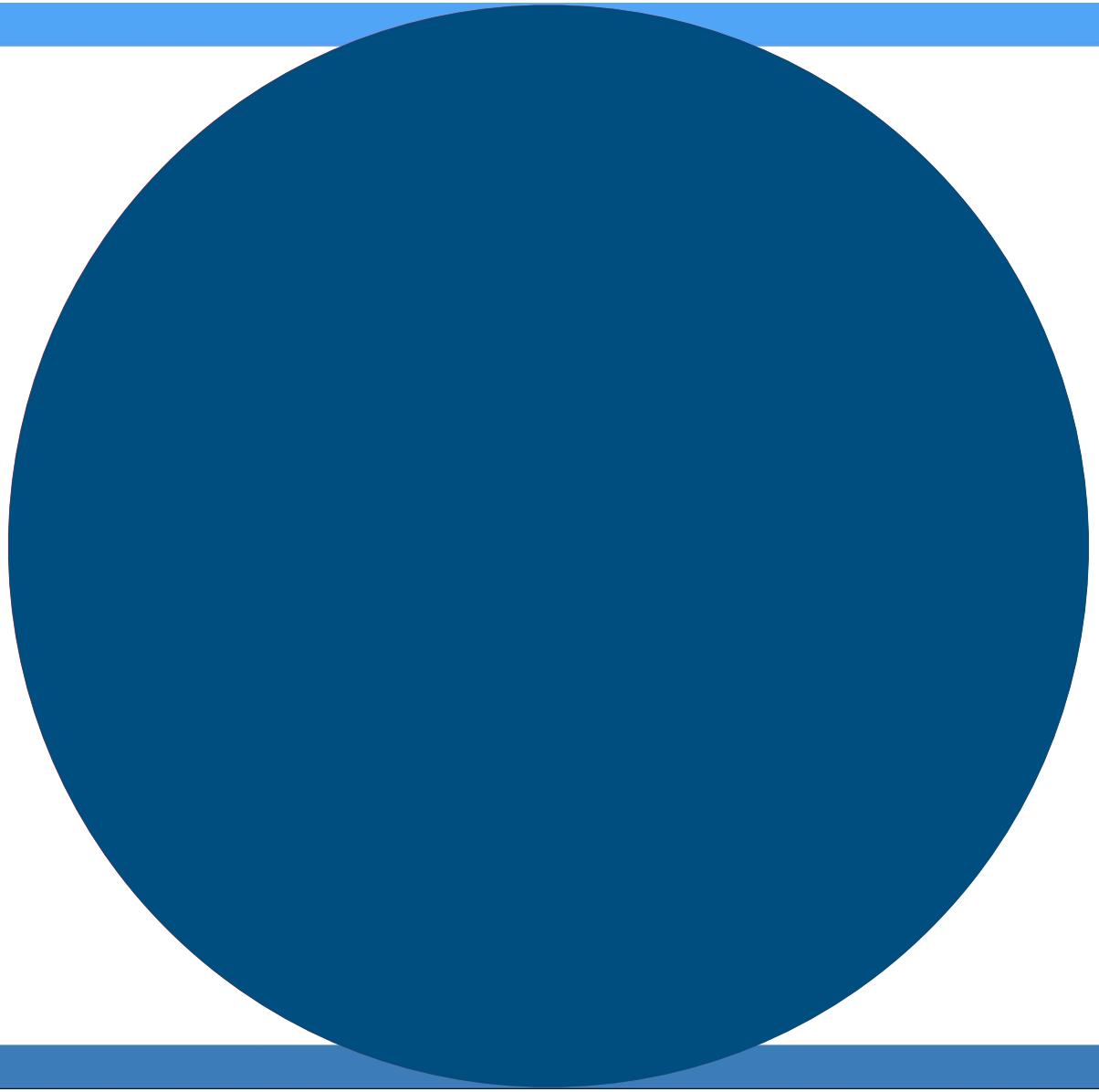

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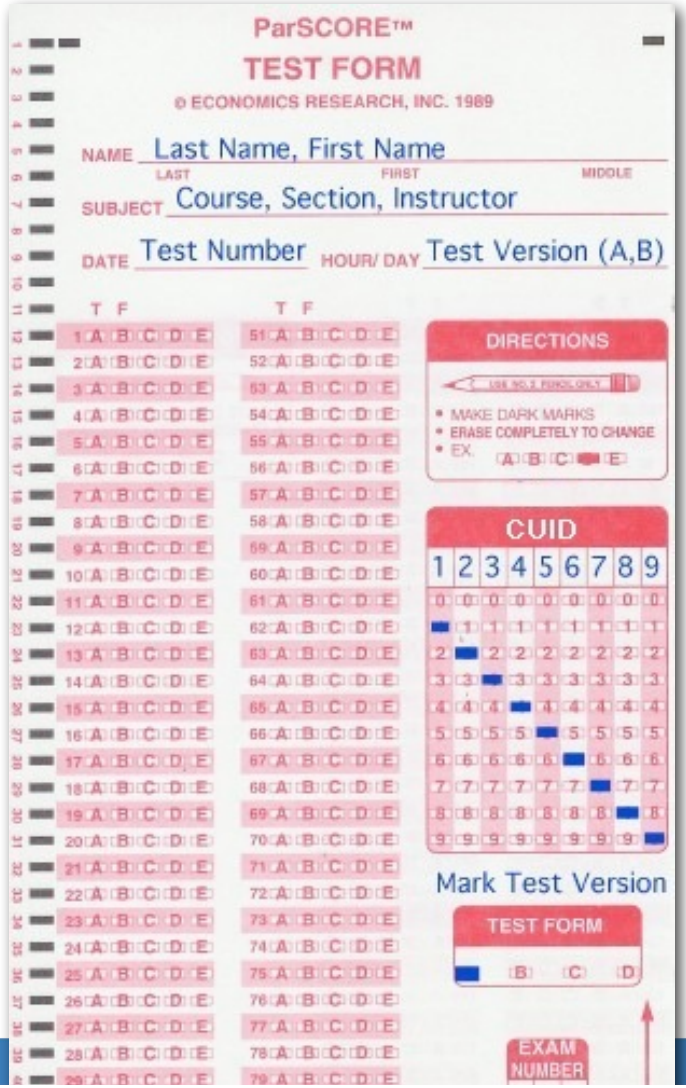
3. Why is prototyping useful? (list as many reasons as you can)



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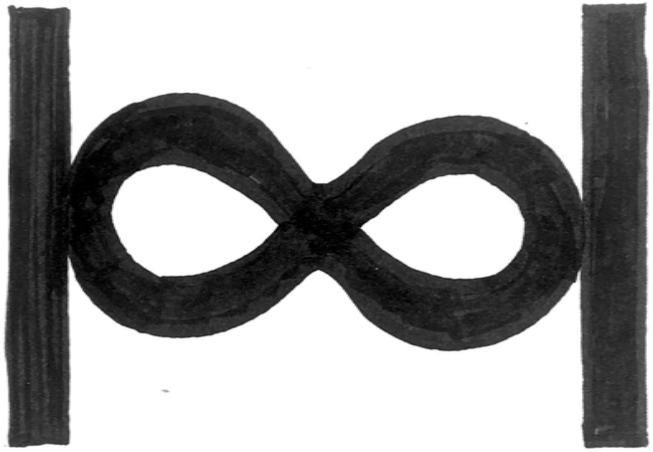

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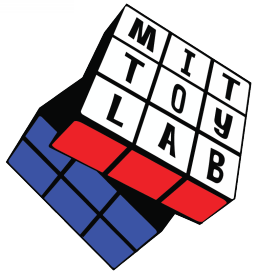

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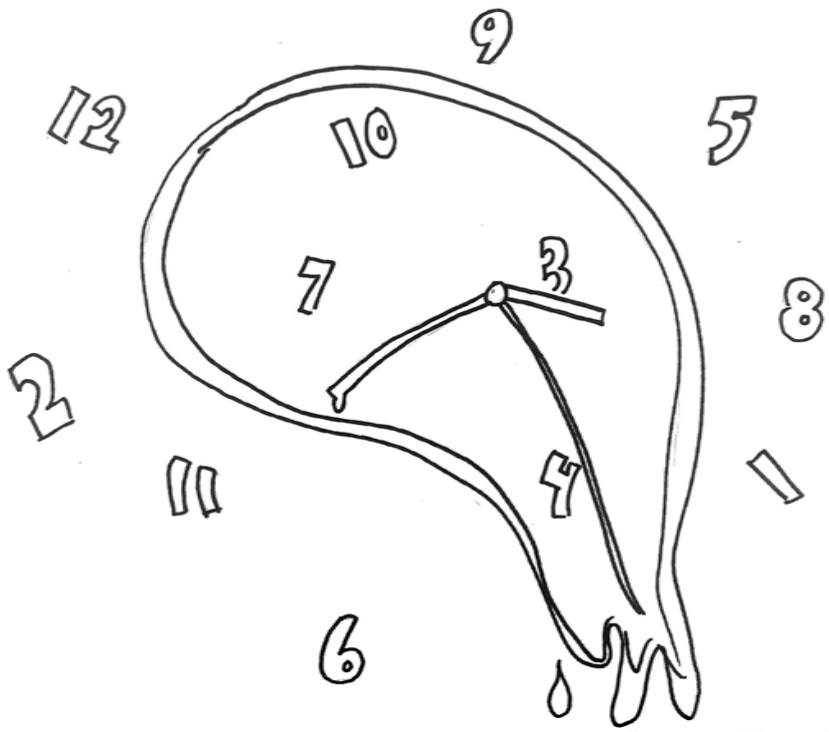

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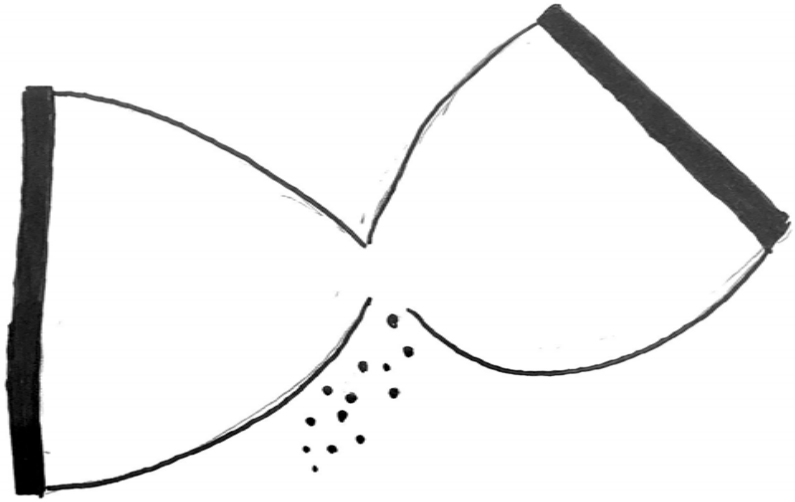

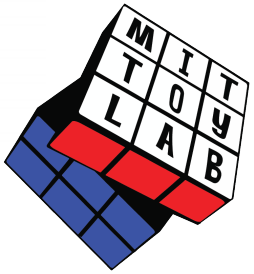

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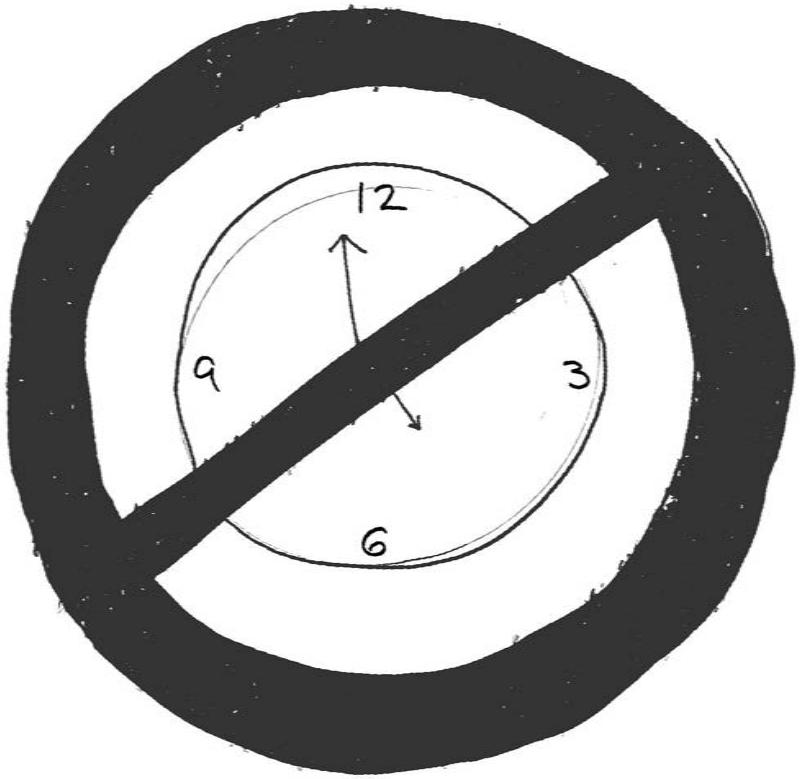

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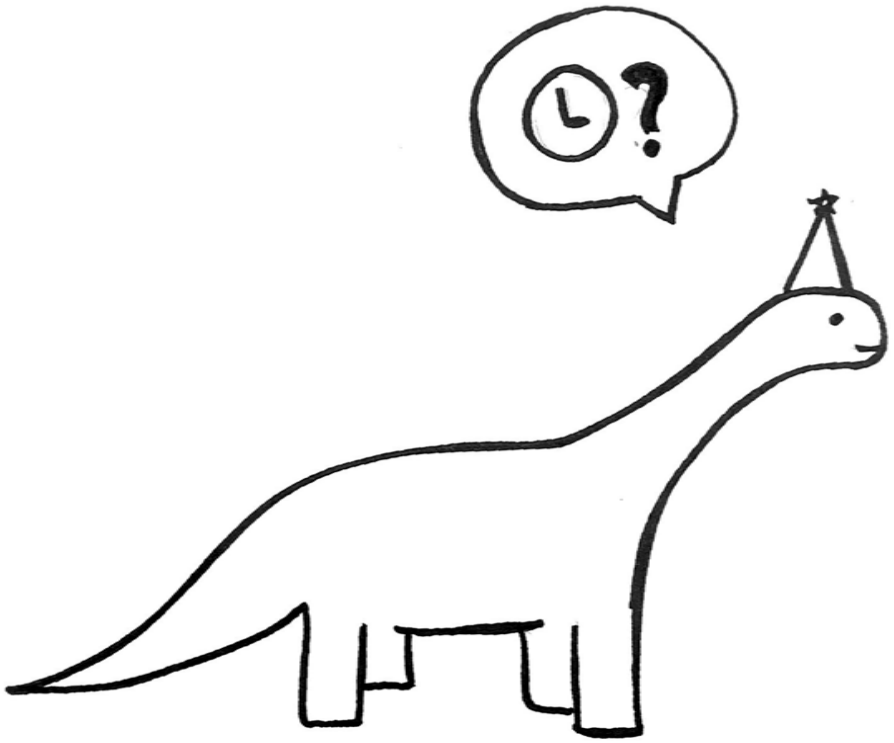

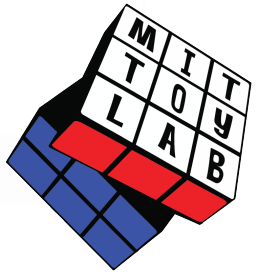

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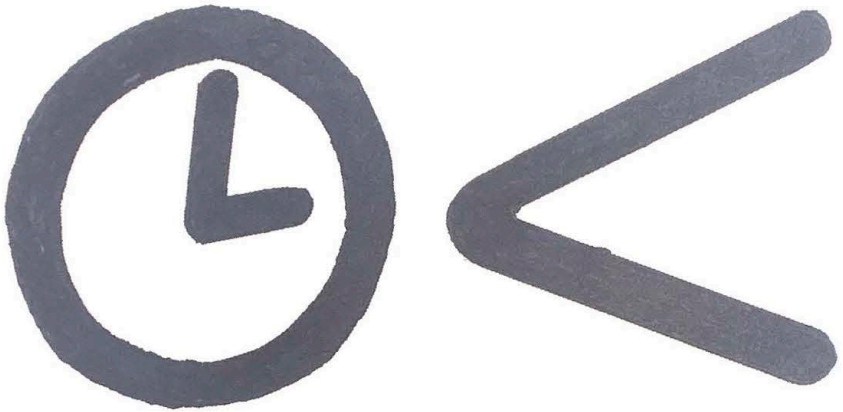

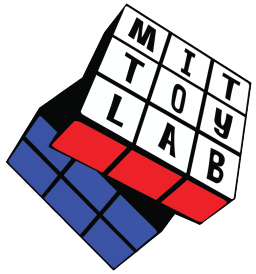

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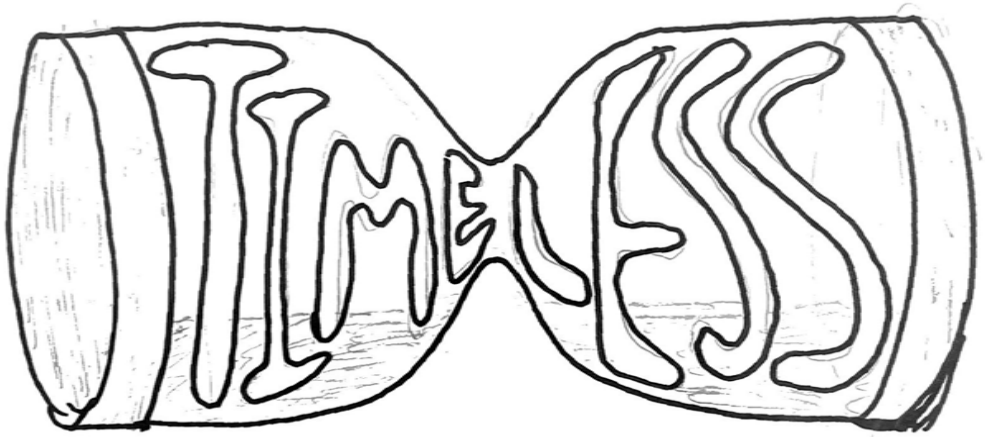

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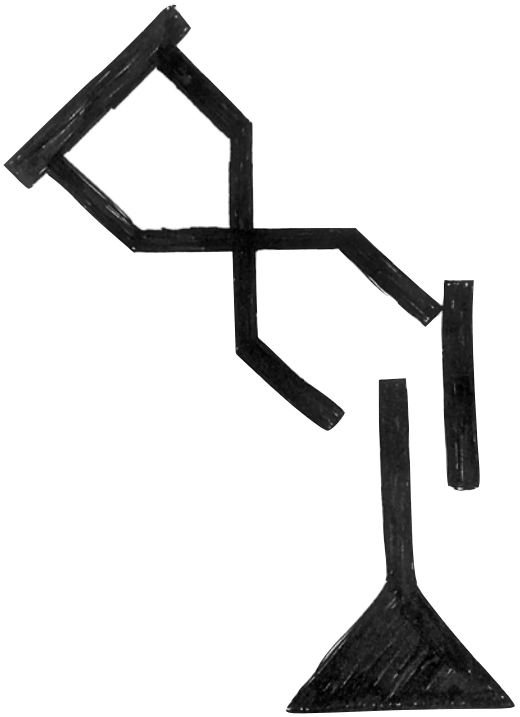

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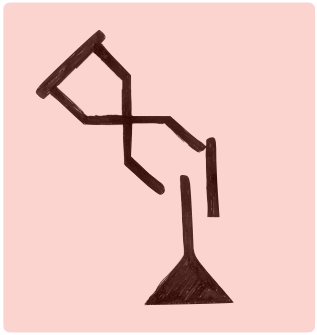
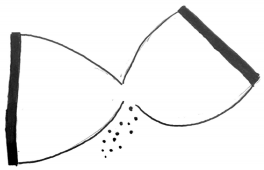

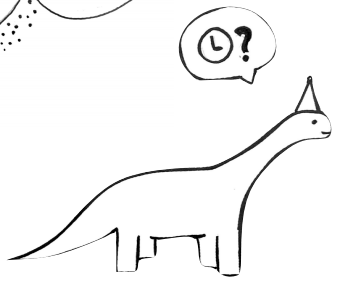
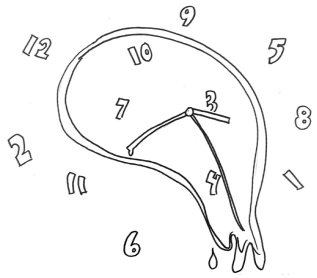
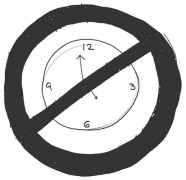
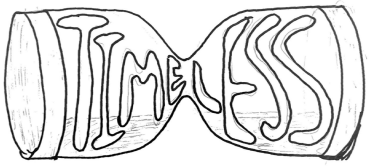

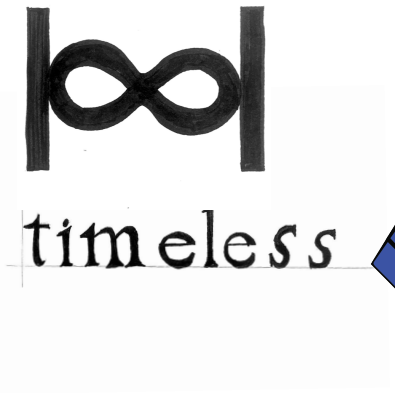

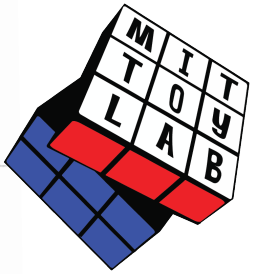

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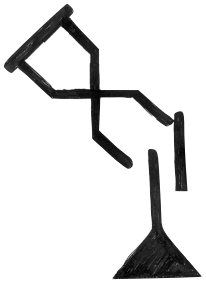

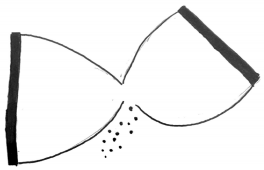

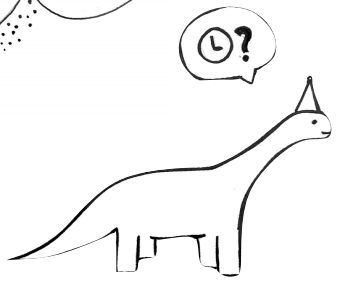

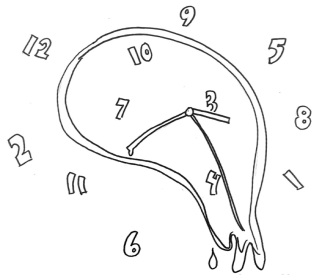

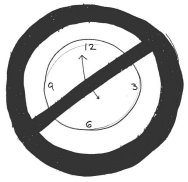

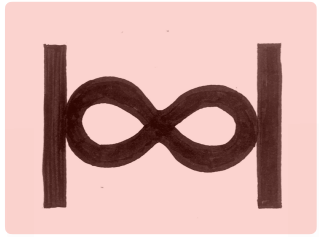

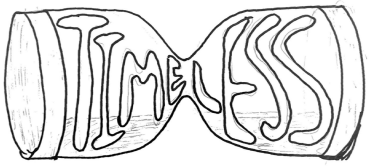

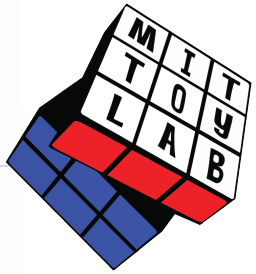

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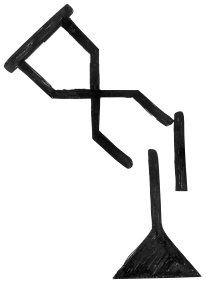

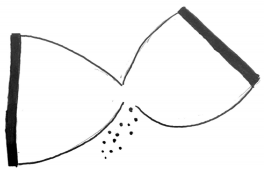

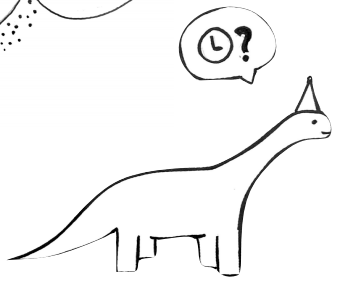

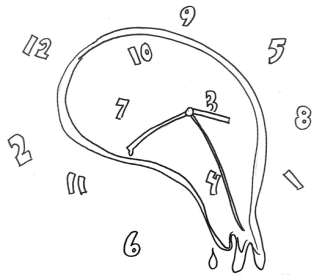

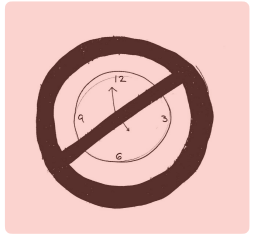

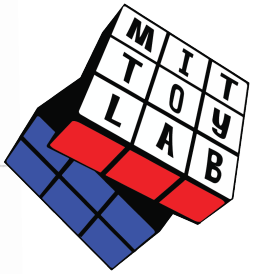

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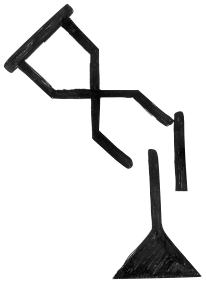

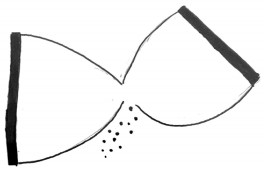

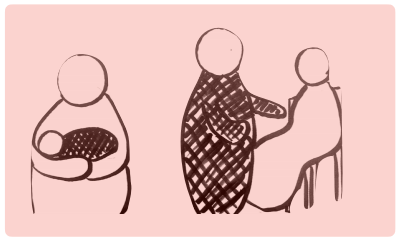

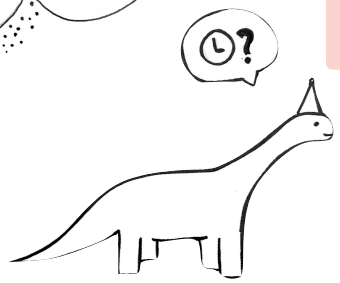

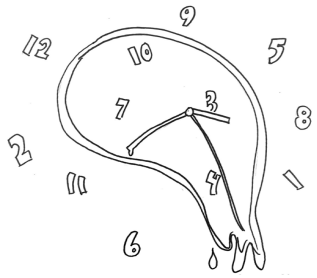

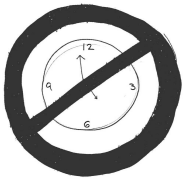

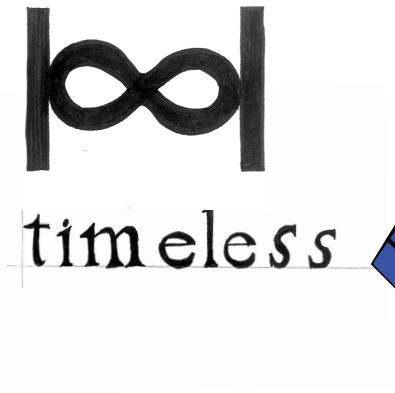

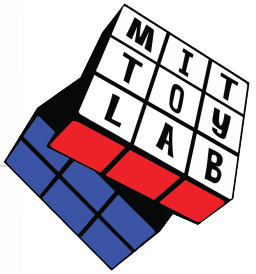

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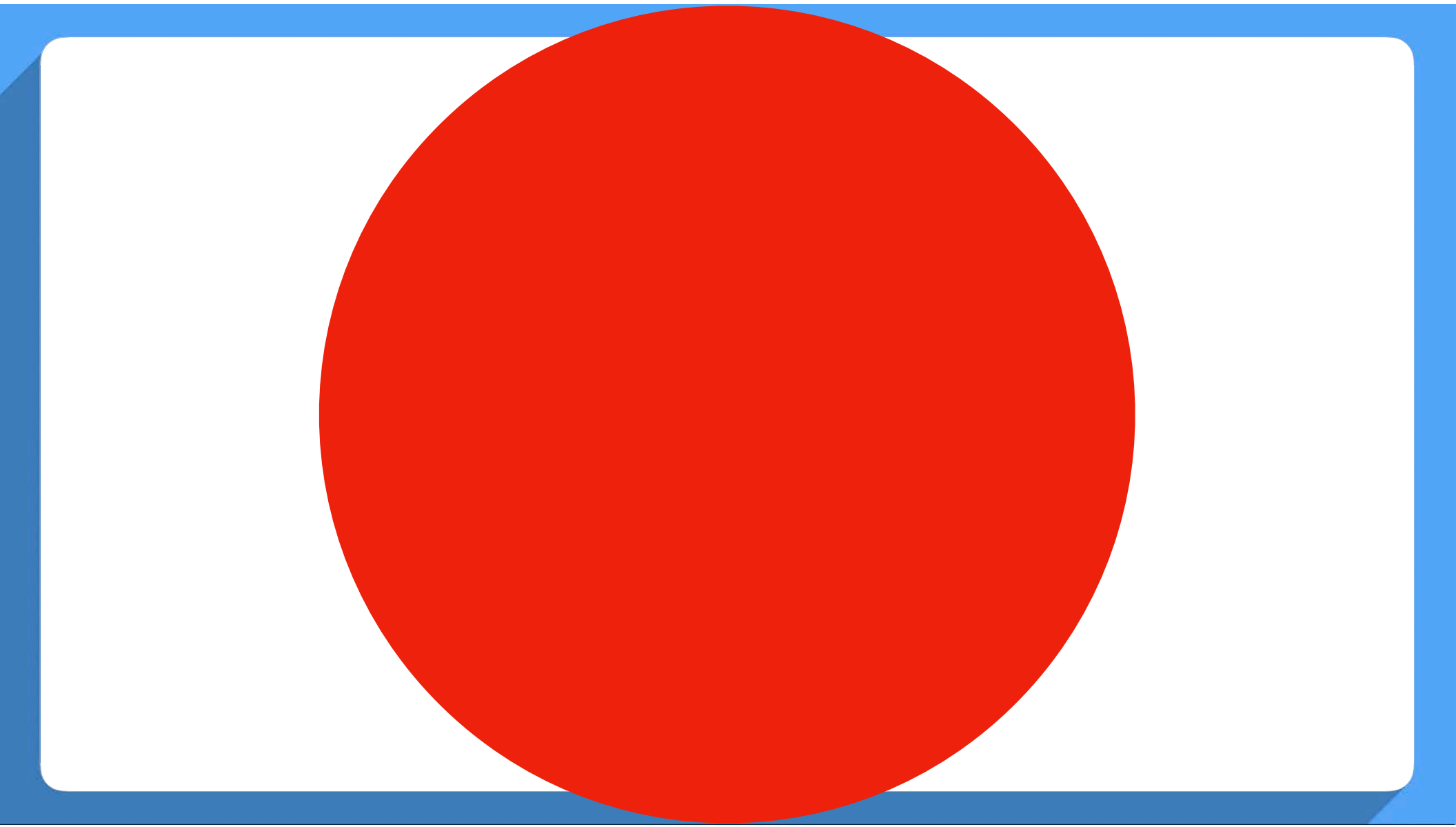
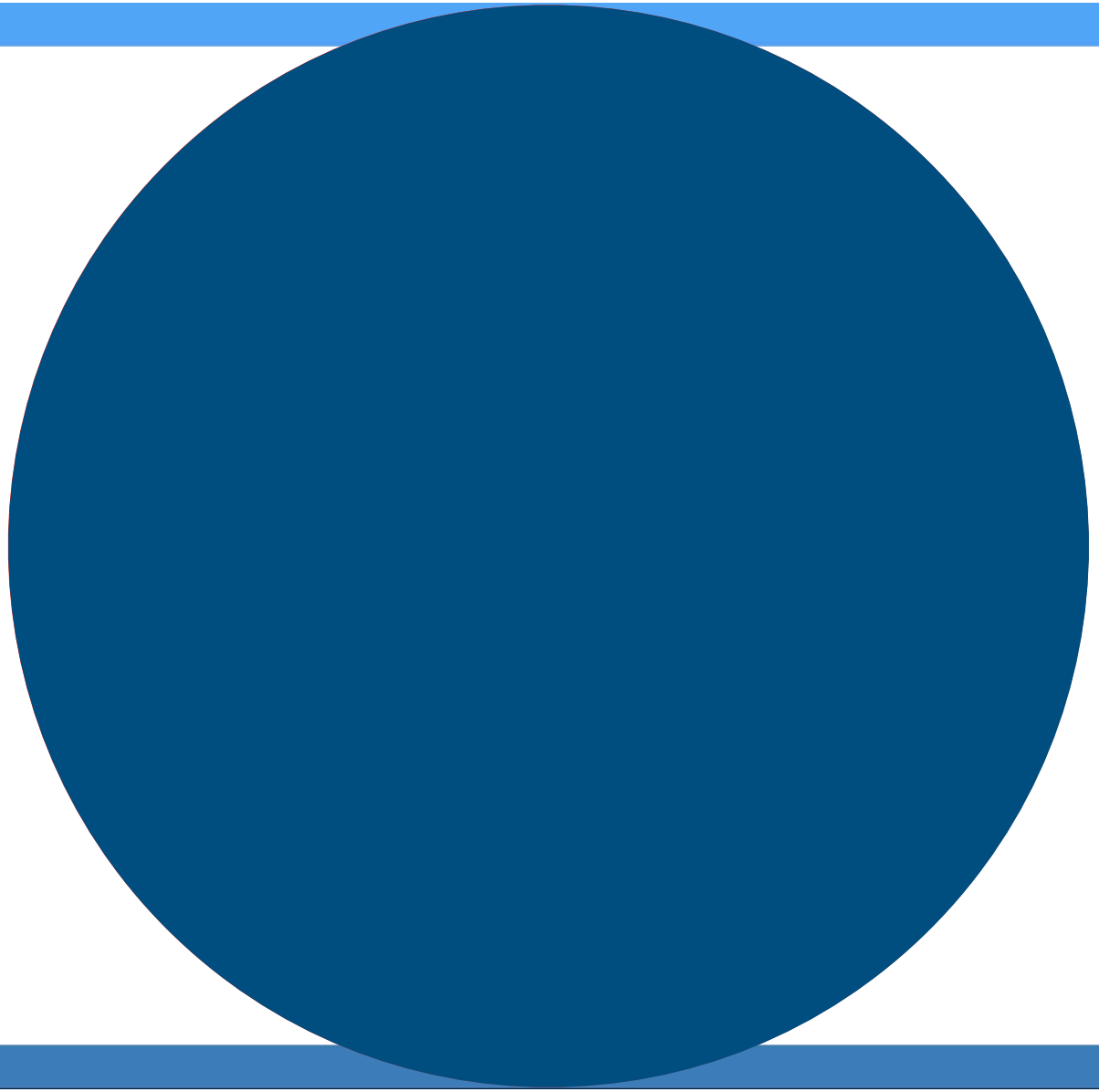
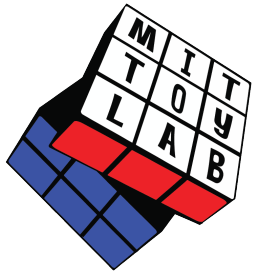




Sematics feel: visual emotions

I found I could say things with color and ***shapes*** that I couldn't say any other way—things I had no words for.

Georgia O'Keeffe

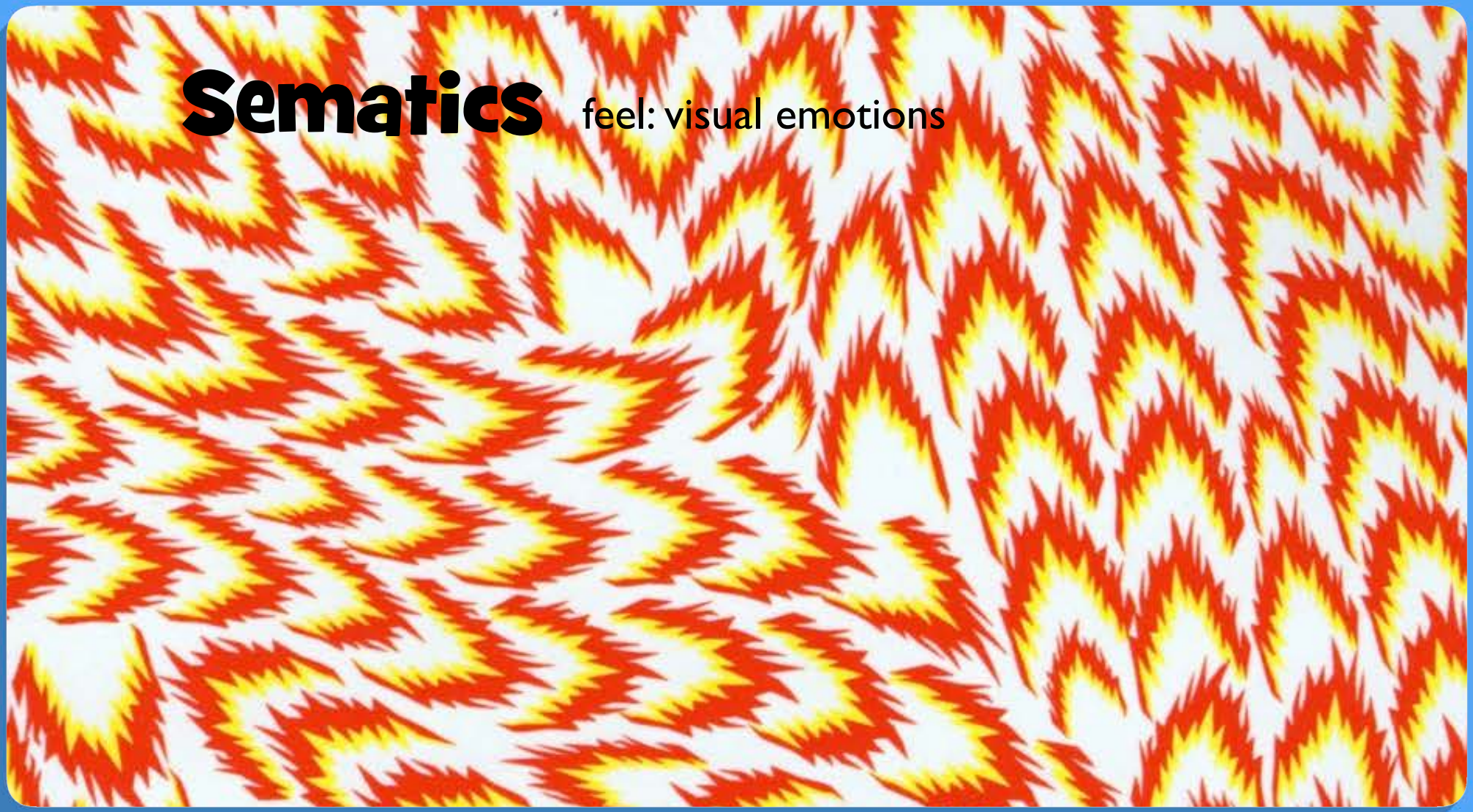


Sematics

feel: visual emotions

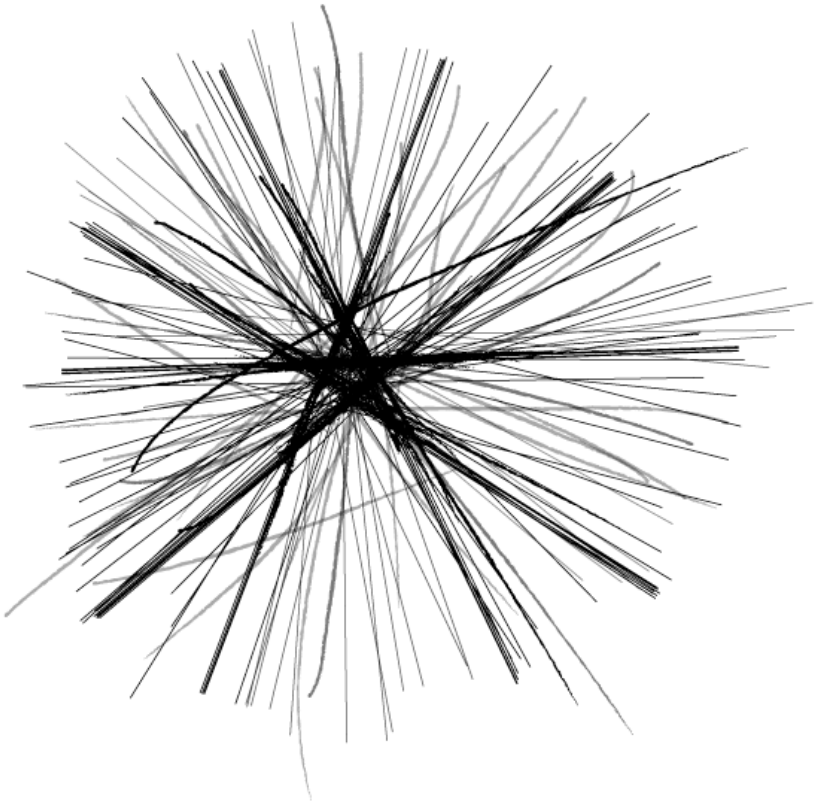
Sematics

feel: visual emotions



Sematics

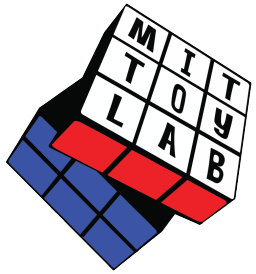
feel: visual emotions



Sematics

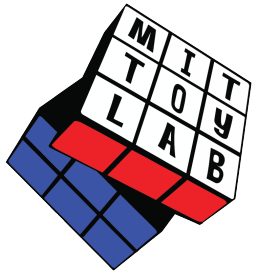
in font form

in font color



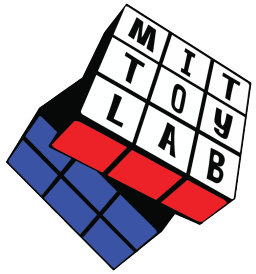
Usability

focus!



Usability

Does everyone our age have a "band"?
I...mean...could her girlfriend's in a band!
Just listen, Jerkie.
Hm.
She's good.
She's...
really good.
Where'd she learn to play so good?
Some guy she knew when she was a teenager. They were both homeless.
I guess he got shot and she's, you know, carrying on his legacy.
Moira was homeless?
Yeah, her dad did a murder suicide thing when she was eleven.
What??
Yeah, then she lived with her dad's parents for a while, but she hated it so much she ran away.
I guess they were super conservative Christian.
She says she never regretted it at all.
Even when she got slapped in the face by a junkie.
Y- you gotta be making this up!
Ask anyone here.
It's totally true.
But... but...
no focus?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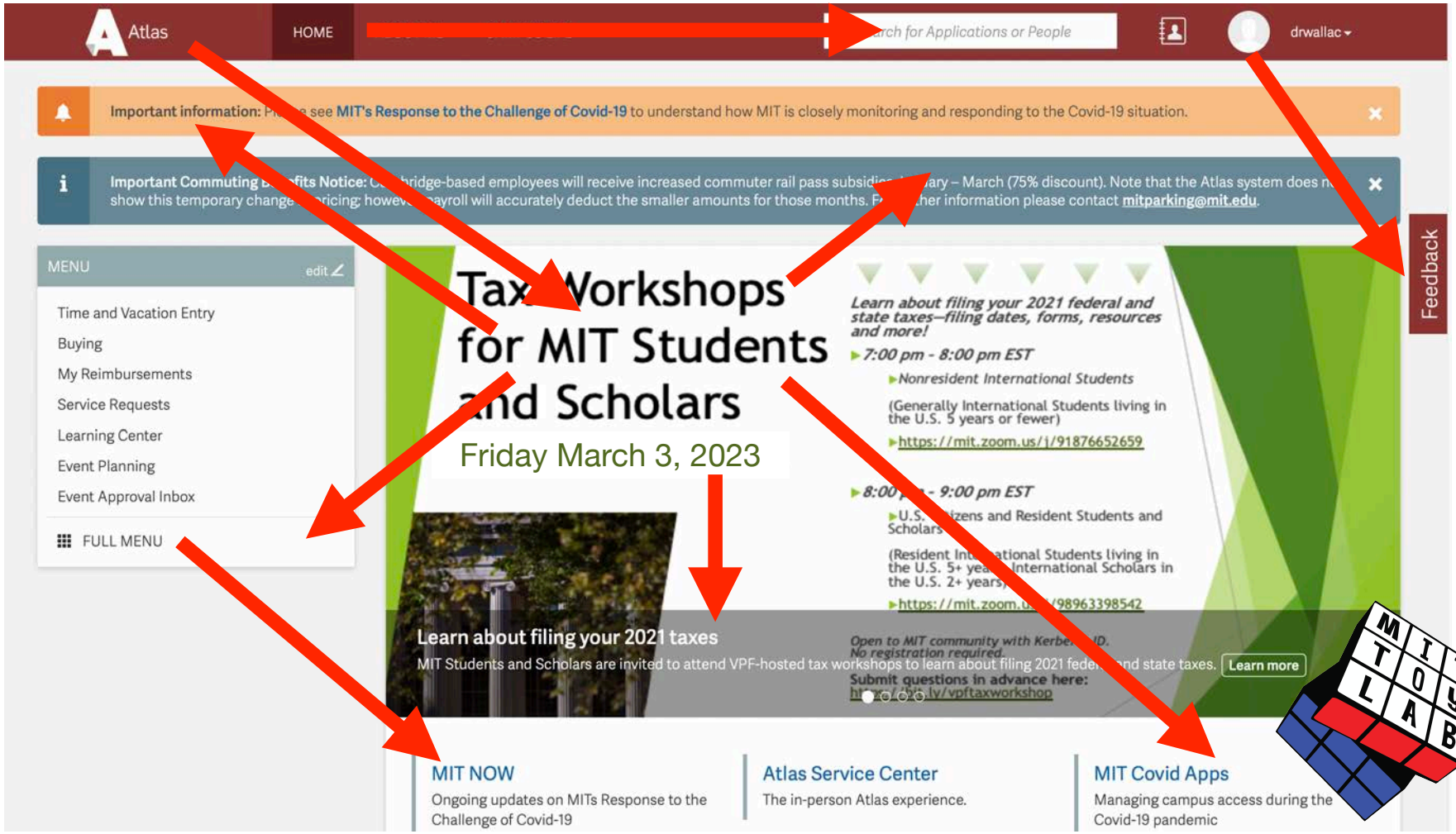
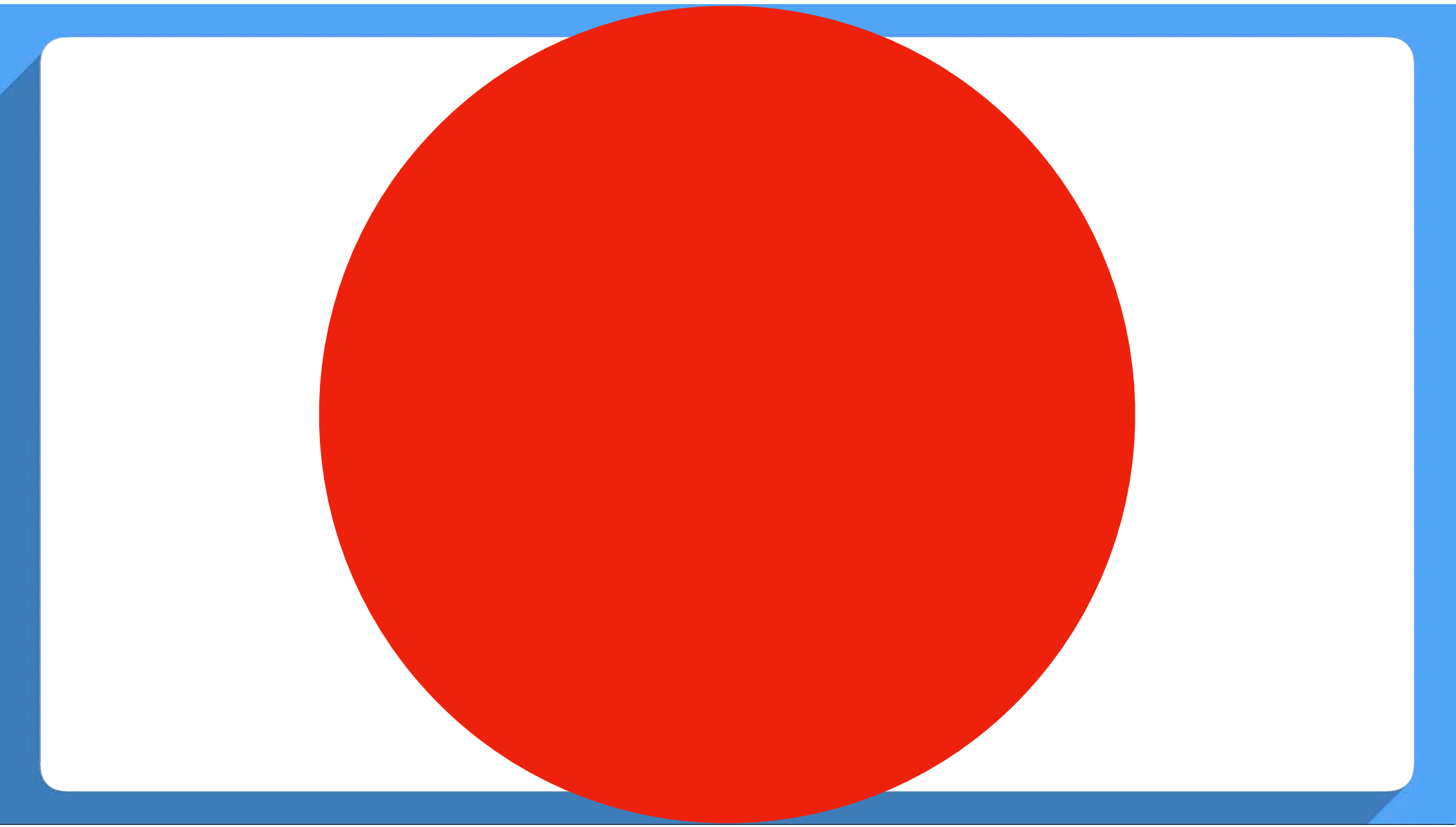
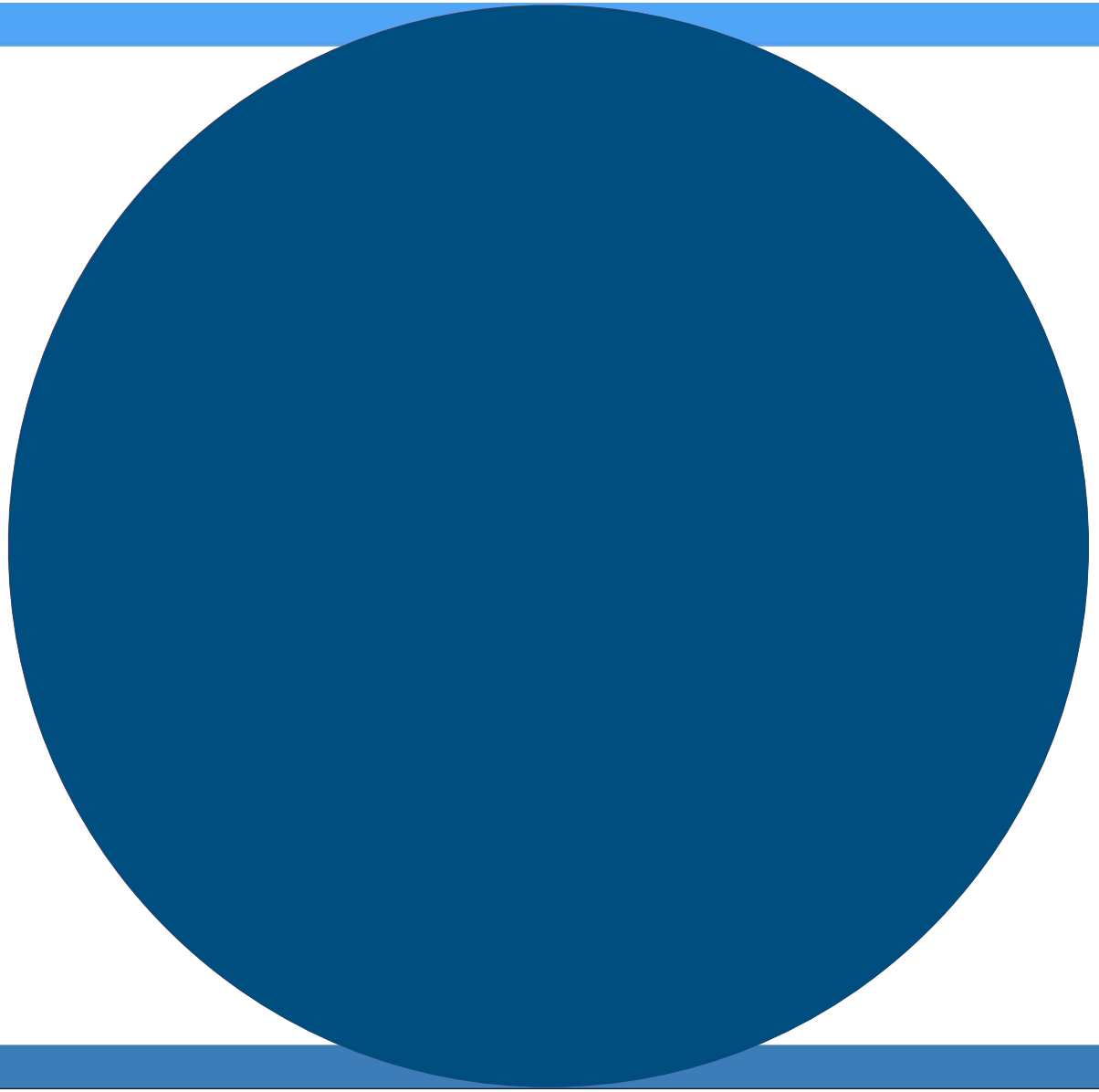
Usability

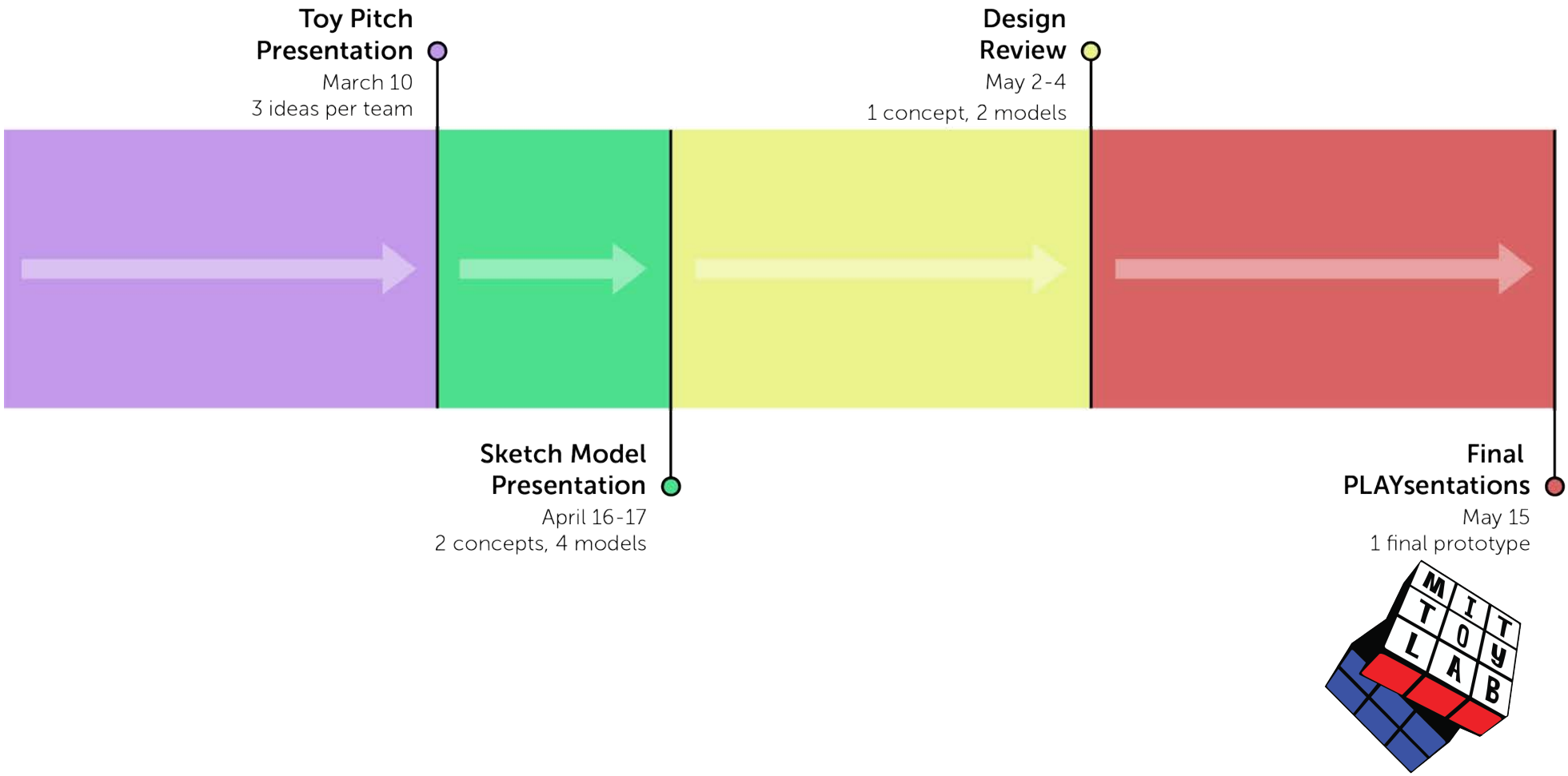
flow


Atlas
HOME
Search for Applications or People
drwallac
Important information: Please see MIT's Response to the Challenge of Covid-19 to understand how MIT is closely monitoring and responding to the Covid-19 situation.
Important Commuting Benefits Notice: Cambridge-based employees will receive increased commuter rail pass subsidies January – March (75% discount). Note that the Atlas system does not show this temporary change in pricing; however, payroll will accurately deduct the smaller amounts for those months. For further information please contact mitparking@mit.edu.
MENU
edit
Time and Vacation Entry
Buying
My Reimbursements
Service Requests
Learning Center
Event Planning
Event Approval Inbox
FULL MENU
Tax Workshops for MIT Students and Scholars
Friday March 3, 2023
Learn about filing your 2021 federal and state taxes—filing dates, forms, resources and more!
7:00 pm - 8:00 pm EST
Nonresident International Students
(Generally International Students living in the U.S. 5 years or fewer)
https://mit.zoom.us/j/91876652659
8:00 pm - 9:00 pm EST
U.S. Citizens and Resident Students and Scholars
(Resident International Students living in the U.S. 5+ years, International Scholars in the U.S. 2+ years)
https://mit.zoom.us/j/98963398542
Learn about filing your 2021 taxes
MIT Students and Scholars are invited to attend VPF-hosted tax workshops to learn about filing 2021 federal and state taxes.
Learn more
Open to MIT community with Kerberos ID. No registration required.
Submit questions in advance here:
https://bit.ly/vpftaxworkshop
MIT NOW
Ongoing updates on MITs Response to the Challenge of Covid-19
Atlas Service Center
The in-person Atlas experience.
MIT Covid Apps
Managing campus access during the Covid-19 pandemic
Feedback
MIT TOY LAB





ATTLE
Cocoa
Prints
FIRE
N
FLY


Toy Pitch Presentation
March 10
3 ideas per team
Design Review
May 2-4
1 concept, 2 models
Sketch Model Presentation
April 16-17
2 concepts, 4 models
Final PLAYsentations
May 15
1 final prototype

Toy Pitch Presentation

March 10

3 ideas per team

Toy Pitch Presentation

March 10

3 ideas per team

March

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April

Su	Mo	Tu	We	Th
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30				

idea pitch!

3 ideas/team, in **vertical** poster format

45 second pitch per idea

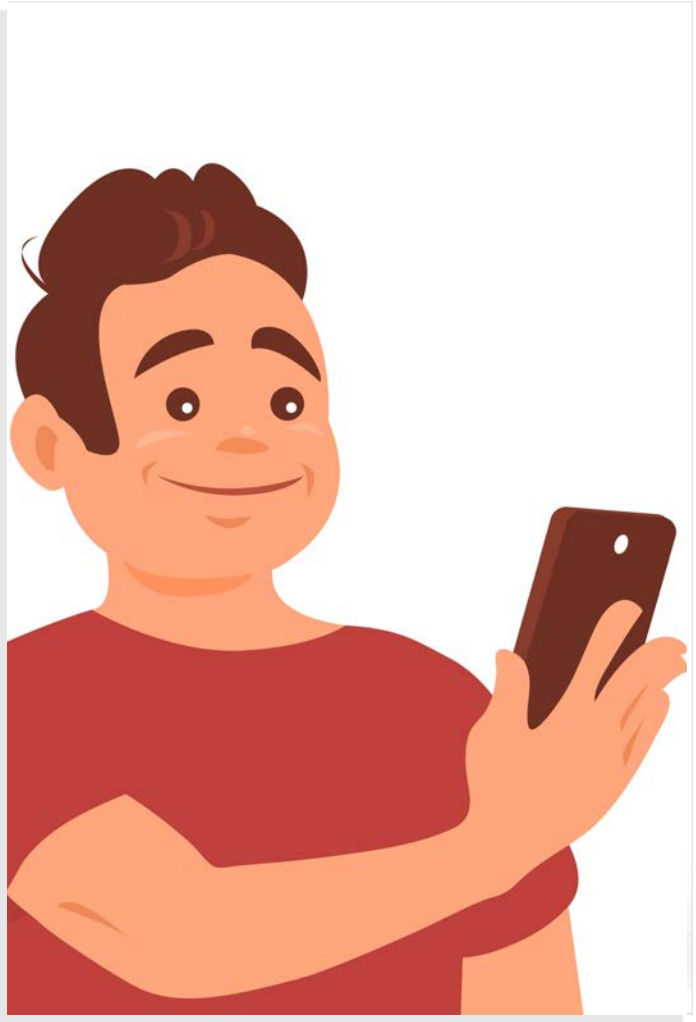
FRANKENPITCH

idea pitch!

3 ideas/team, in **vertical** poster format

45 second pitch per idea

FRANKENPITCH



idea pitch!

3 ideas/team, in **vertical** poster format

45 second pitch per idea

used in first play testing

FRANKENPITCH

pitch feedback
A
WOMAN
PLACE
IS IN TH
HOUSE
MIT
TOY
LAB

Toy Product Design 2.00b

Course Info
Syllabus
Course Staff
Teams
Care Bears
Portfolios
Slideshows
Toy Museum

designy

Accessibility

Hello, and welcome to 2.00b!

Lectures

Lecture videos are available on request.

Fri, Mar 10: Making your pitch. It's going to be an exciting ride!

Lecture 9: Sketchy play! Are you red, or blue? Be ready for some action!
Lecture 8: The (elevator) ride handouts

Labs

Week of Mar 6

Lab 4: pew pew Pugh! Getting ready for your magic elevator ride!
In lab, you'll pinup your new idea sketches, and select your team's three ideas. Then, you'll work on your posters for your idea pitches, 45 seconds per idea, that will be during class on Friday the 10th!

Please bring your 3 updated ideas for pinup, and submit one idea for your portfolio. See the details.

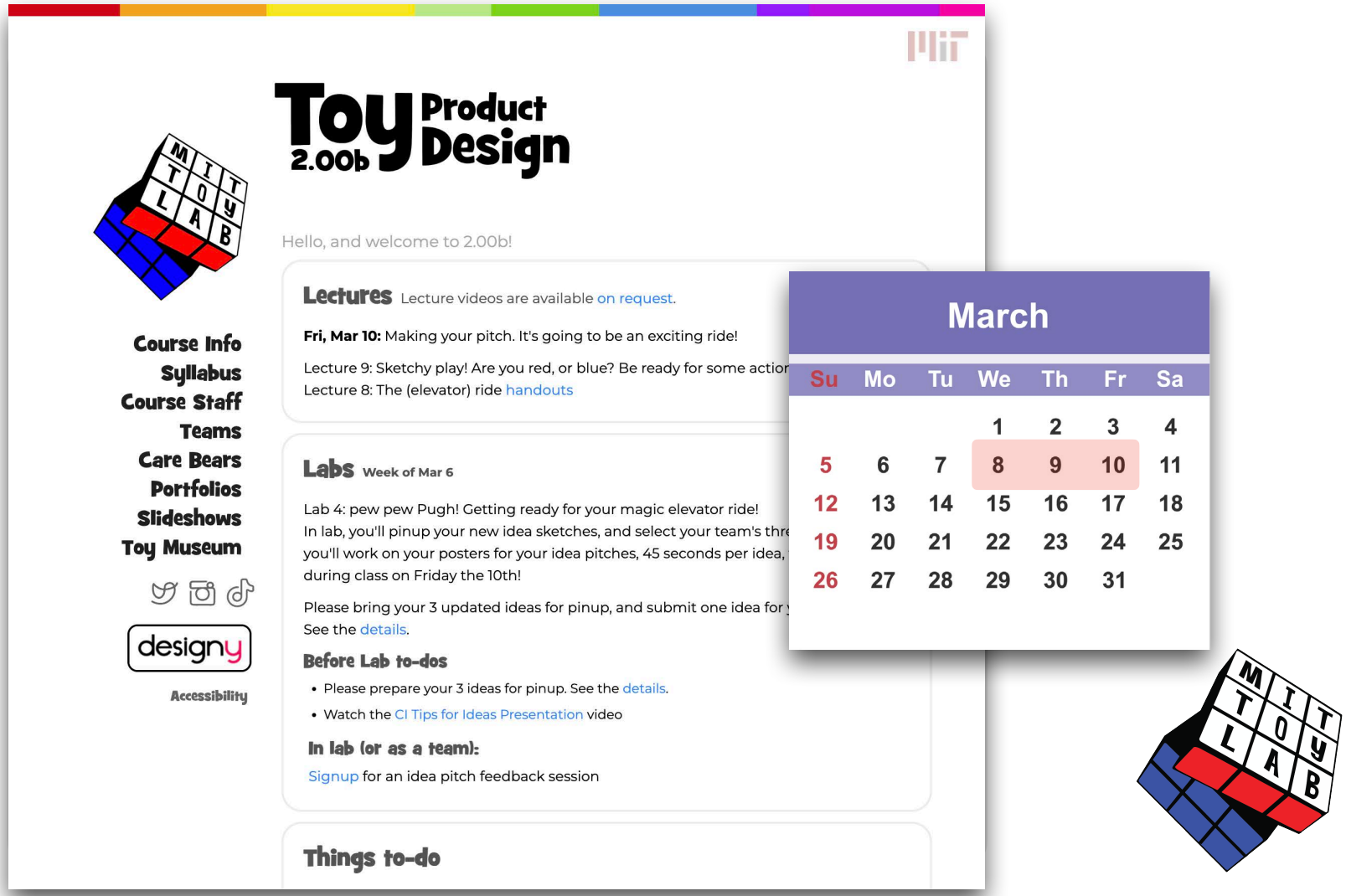
Before Lab to-dos

- Please prepare your 3 ideas for pinup. See the details.
- Watch the CI Tips for Ideas Presentation video

In lab (or as a team):

Signup for an idea pitch feedback session

Things to-do


Toy Product Design
2.00b
Course Info
Syllabus
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Portfolios
Slideshows
Toy Museum
designy
Accessibility
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Things to-do
March
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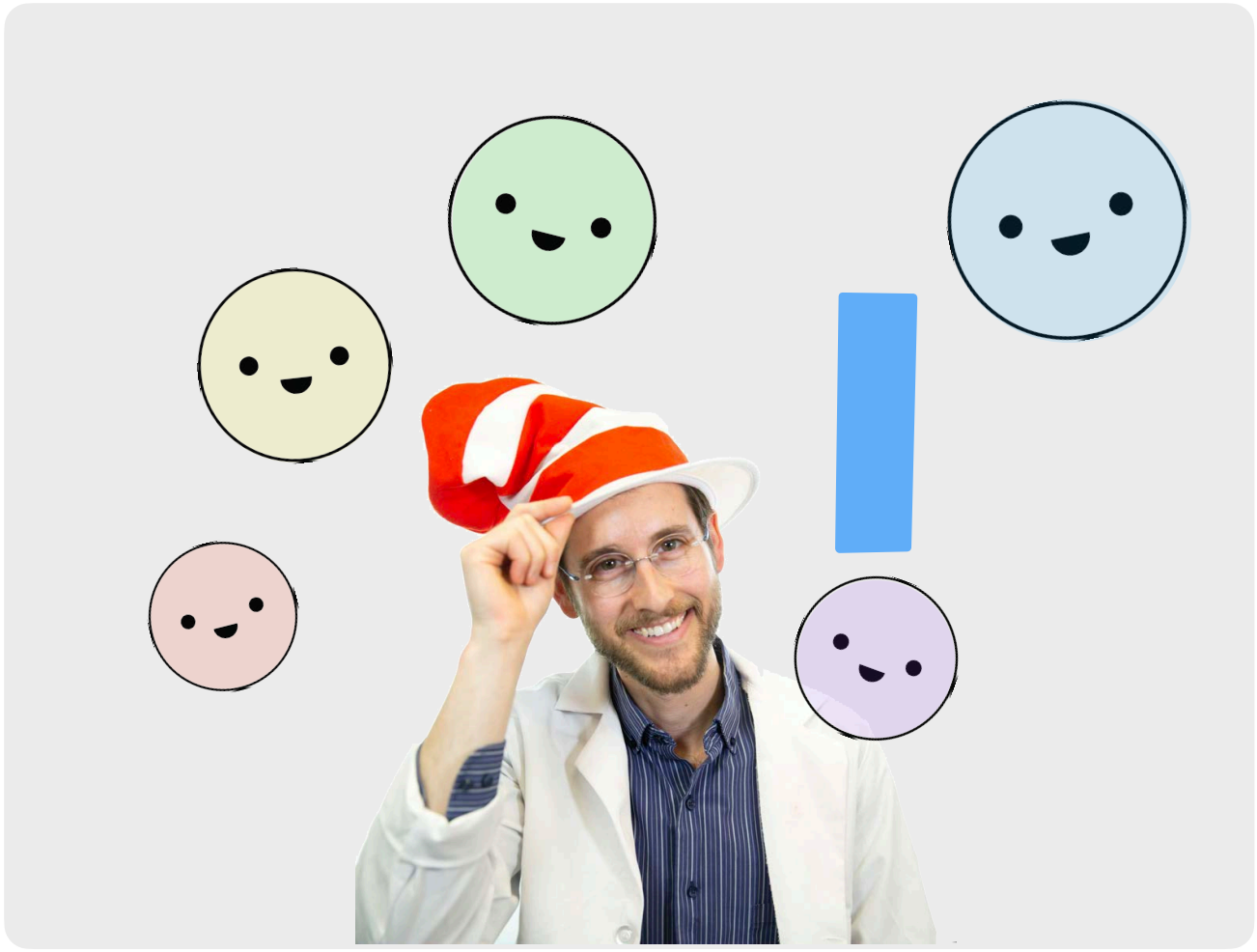
5 6 7 8 9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30 31



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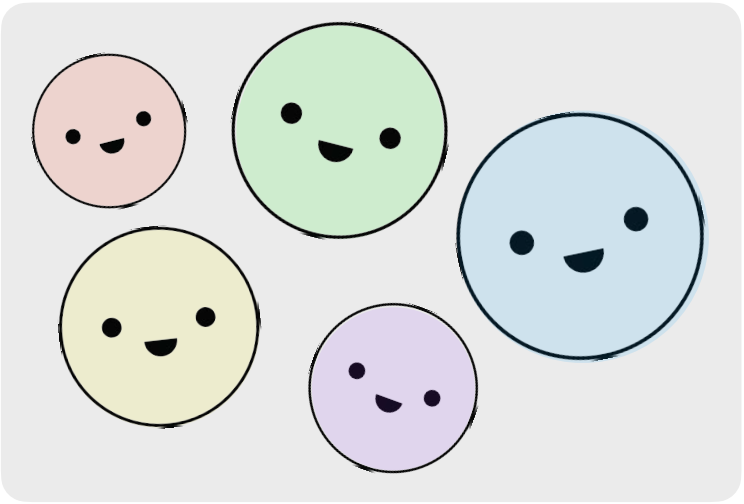

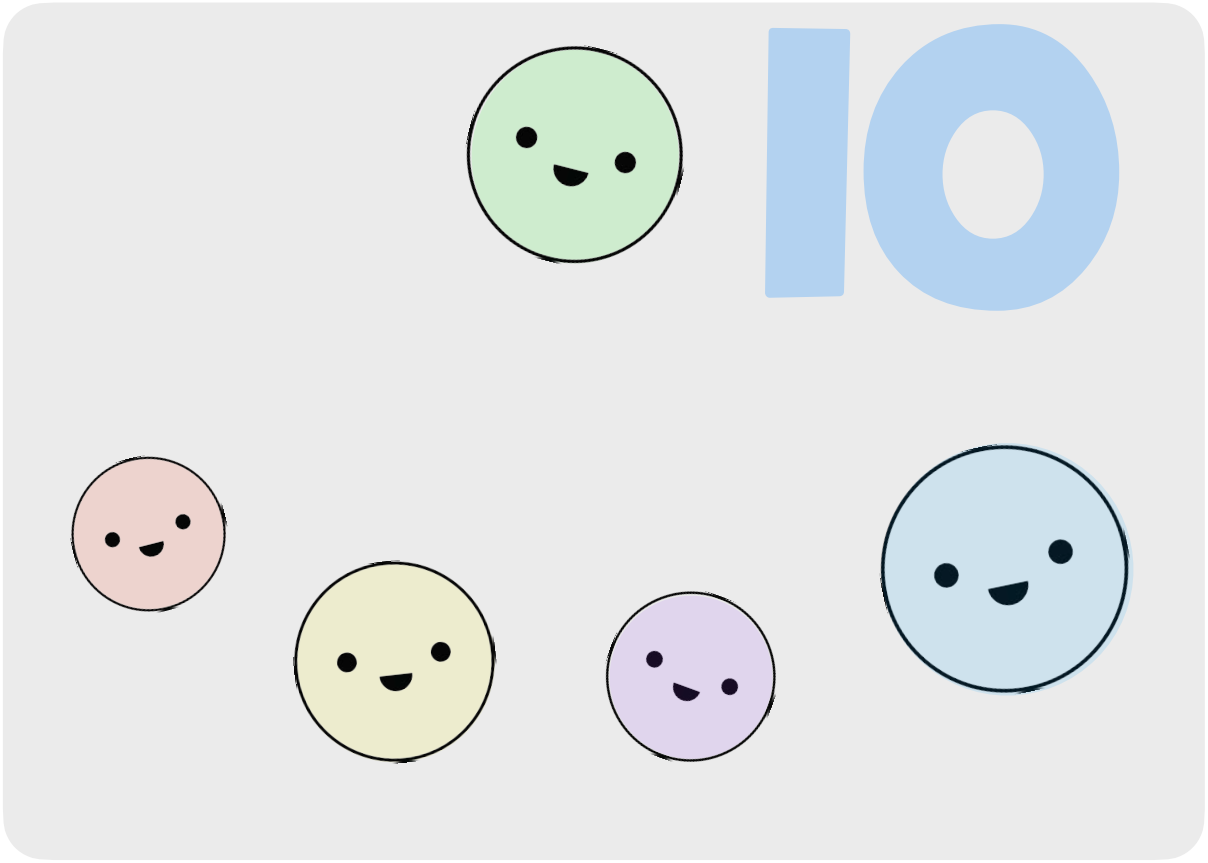
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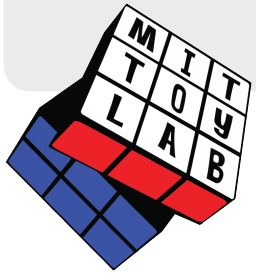
M I T
T O y
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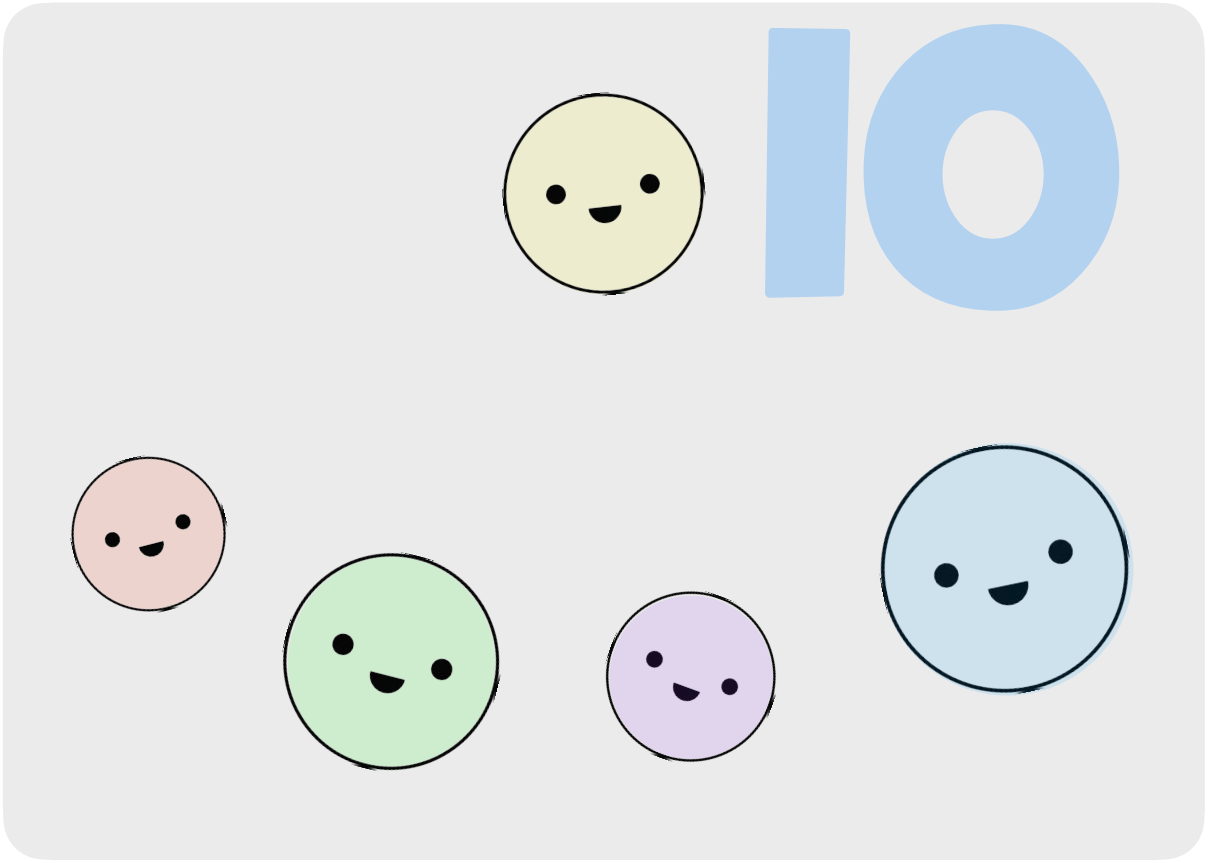
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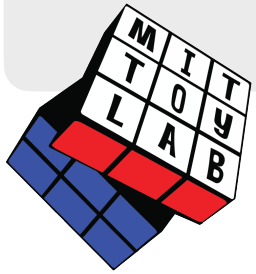
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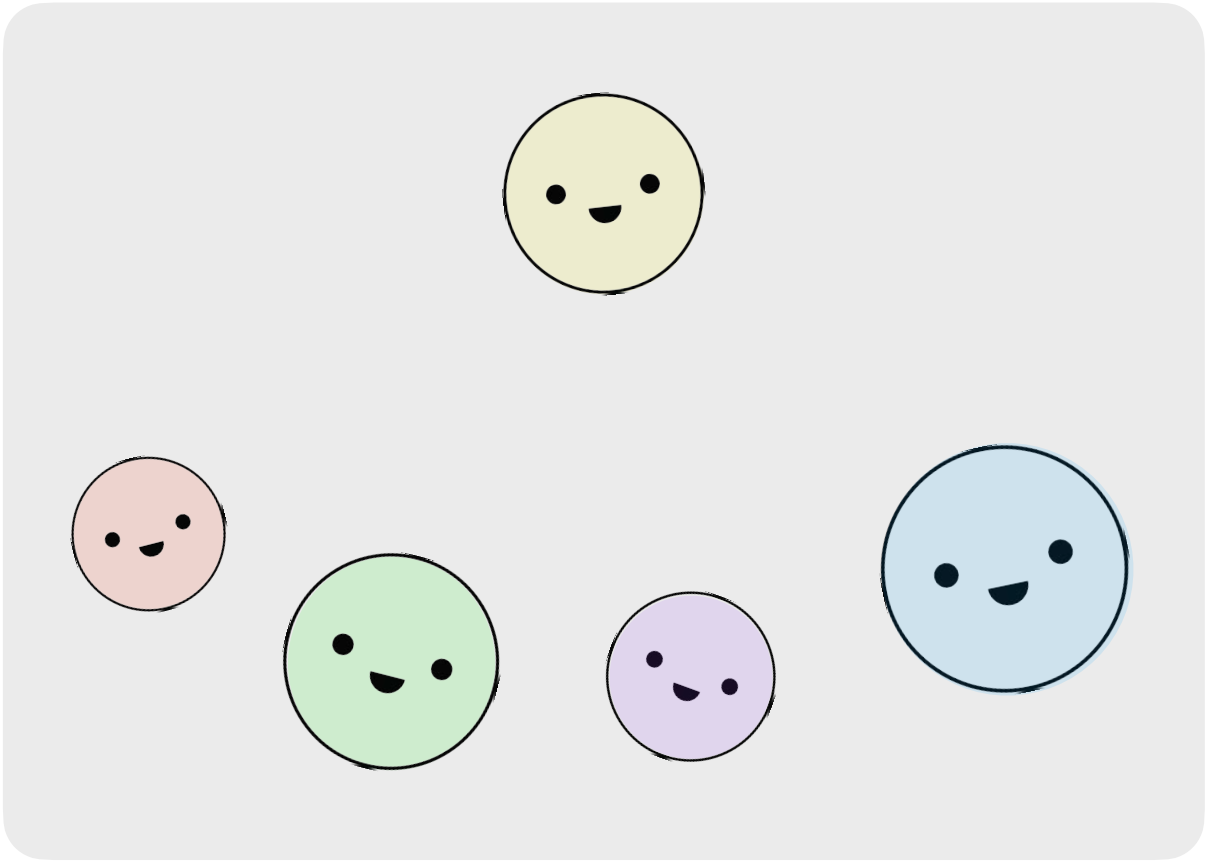

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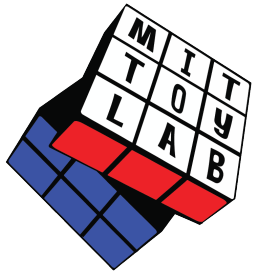

BLOCKS
DRAW
3
7
9
8

TOP BLOCK

March

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19	20	21	22	23	24	25
26	27	28	29	30	31	

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Th	Fr	Sa
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23	24	25

April

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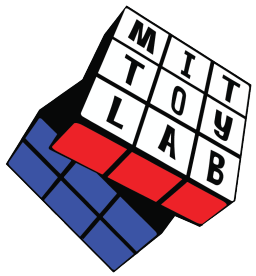
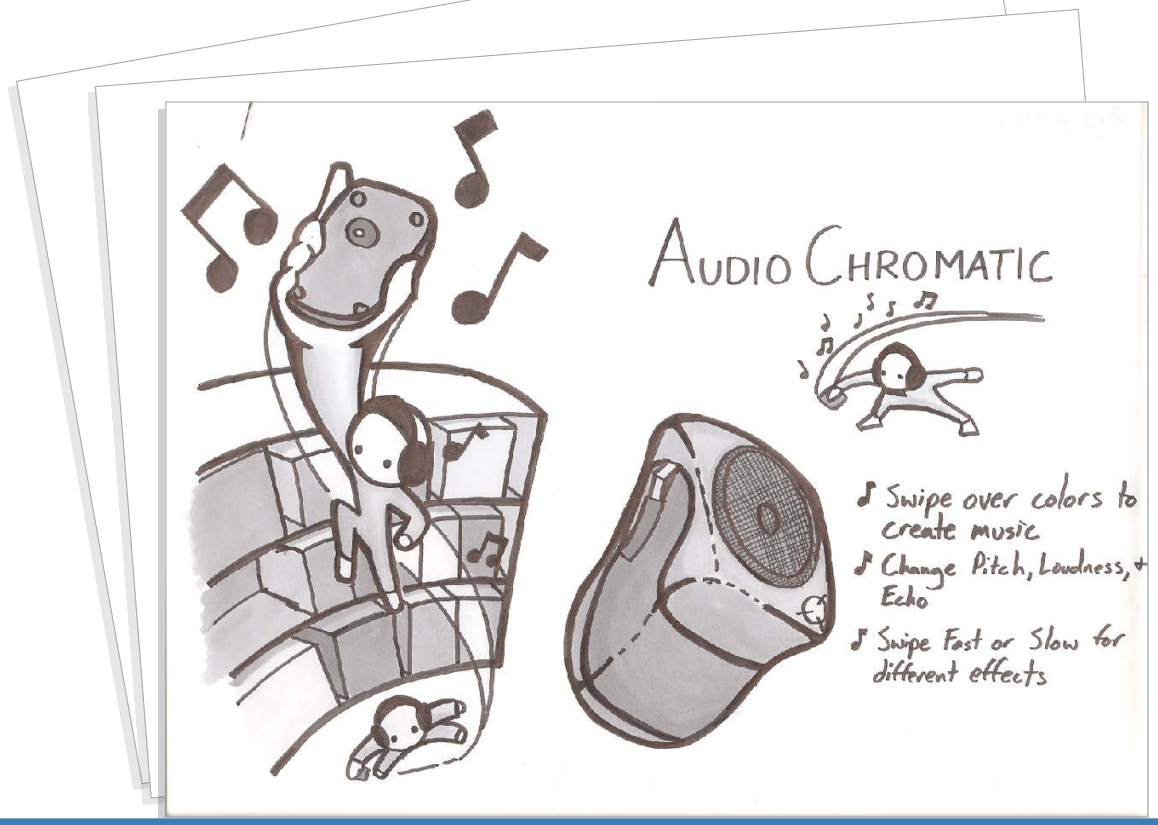


Lab Deliverable!



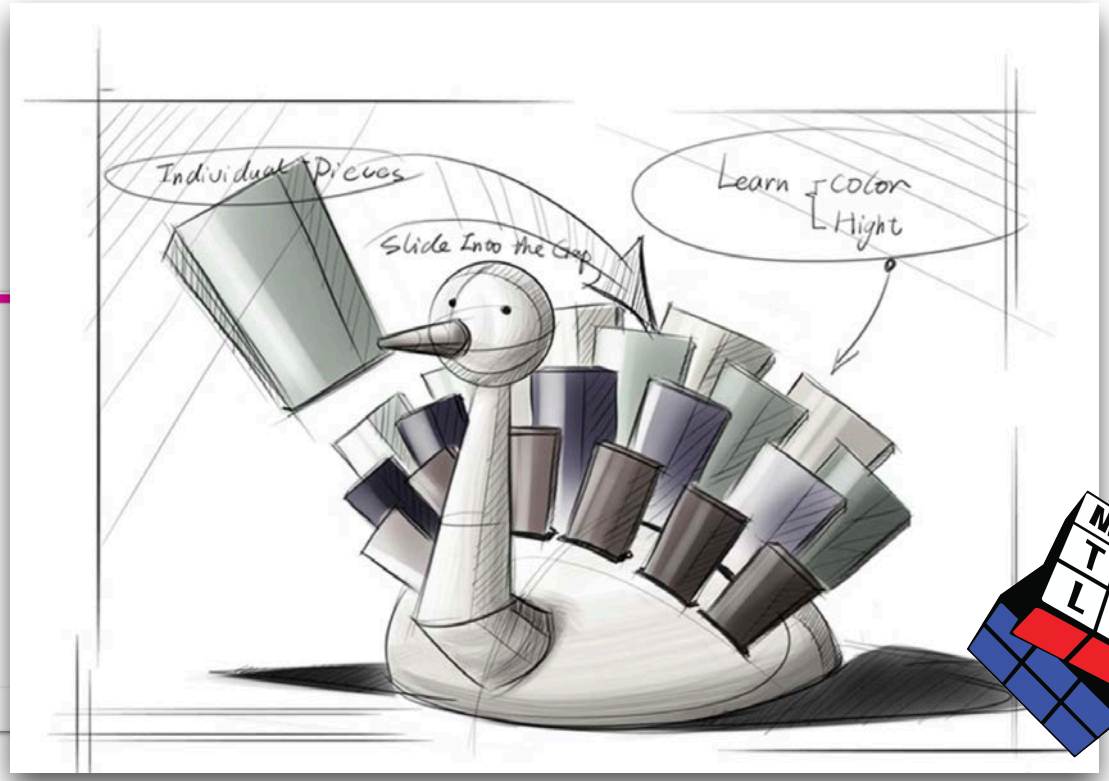
Bring top 3 new or updated ideas

3 sketches in your notebook,
3 refined, *shaded* sketches on 8.5 x 11" paper

Reminder!
Your team's final toy will come from one of the ideas generated so far.

Identify toys that are most similar on the market

Another portfolio piece!



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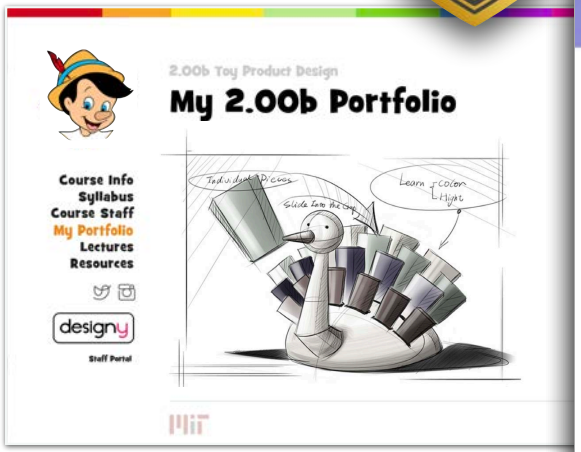
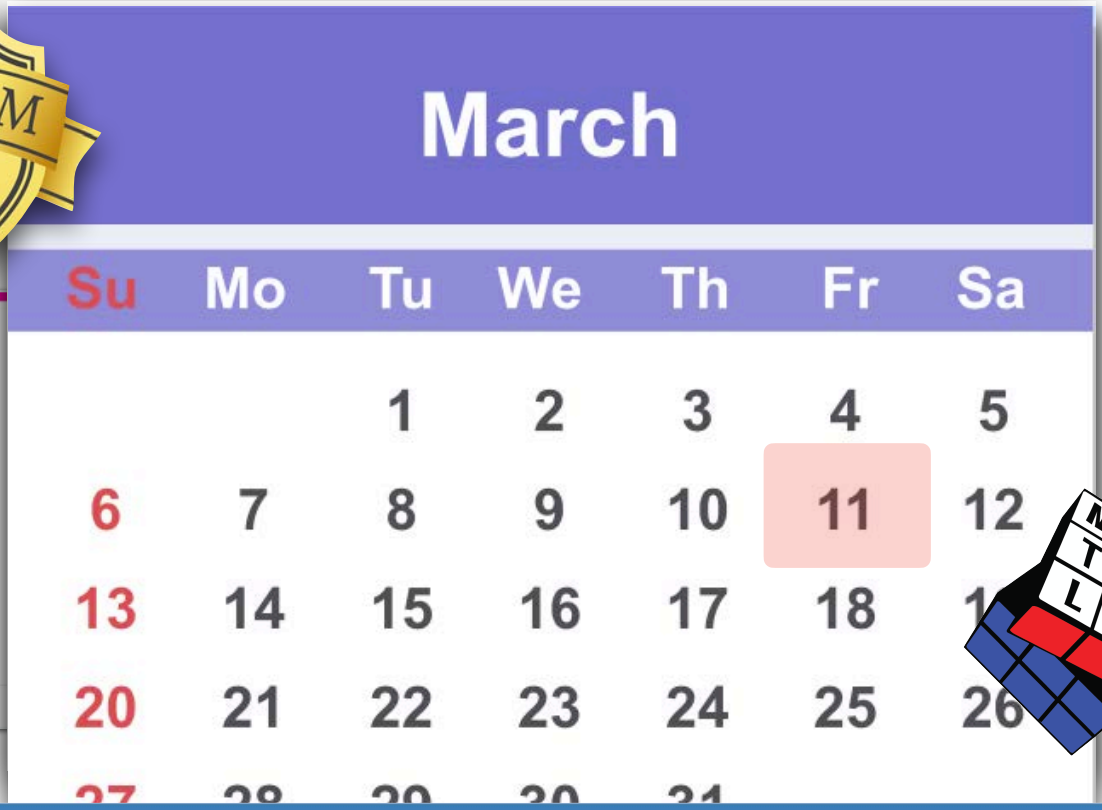
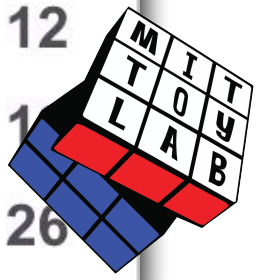
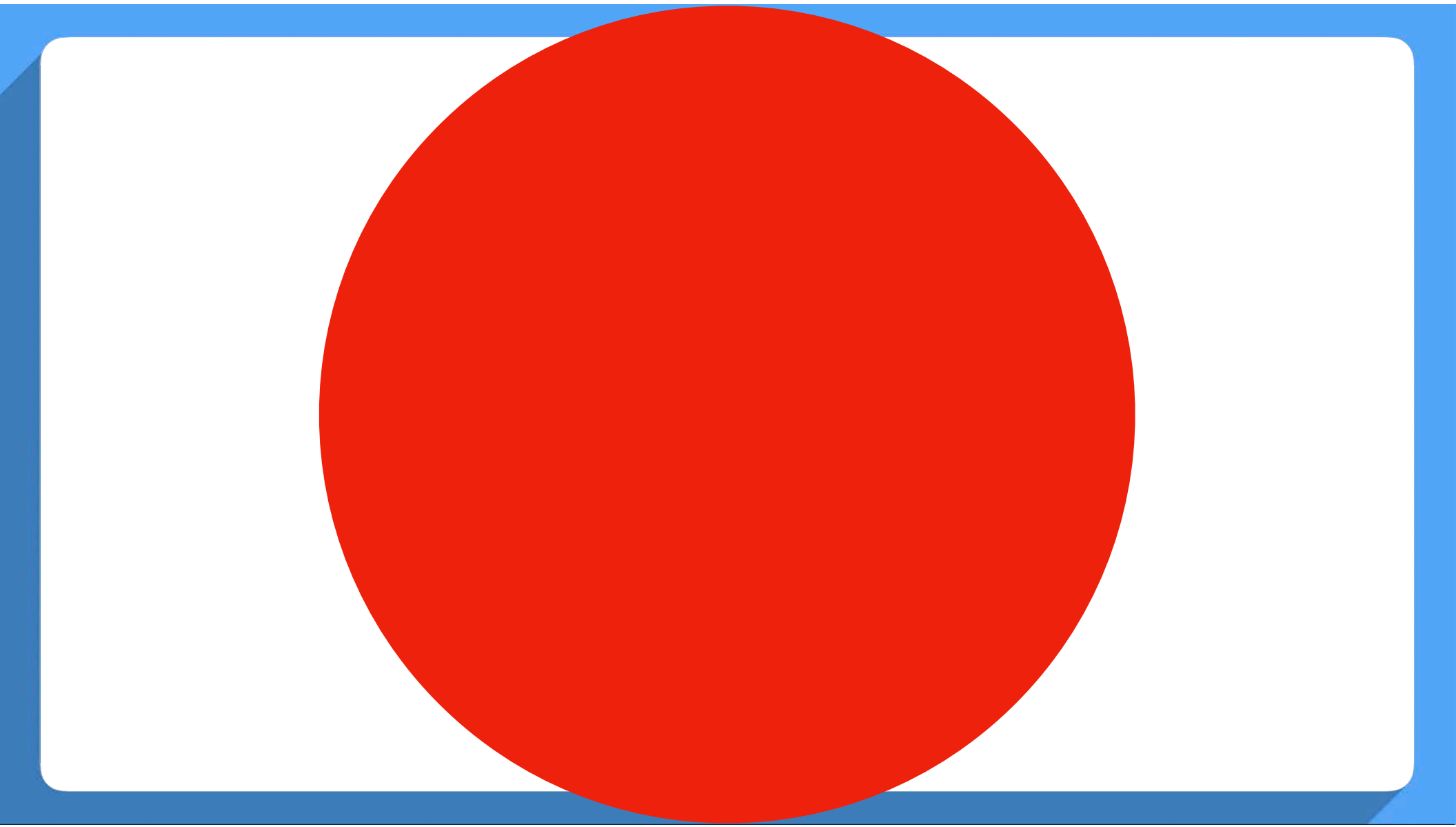
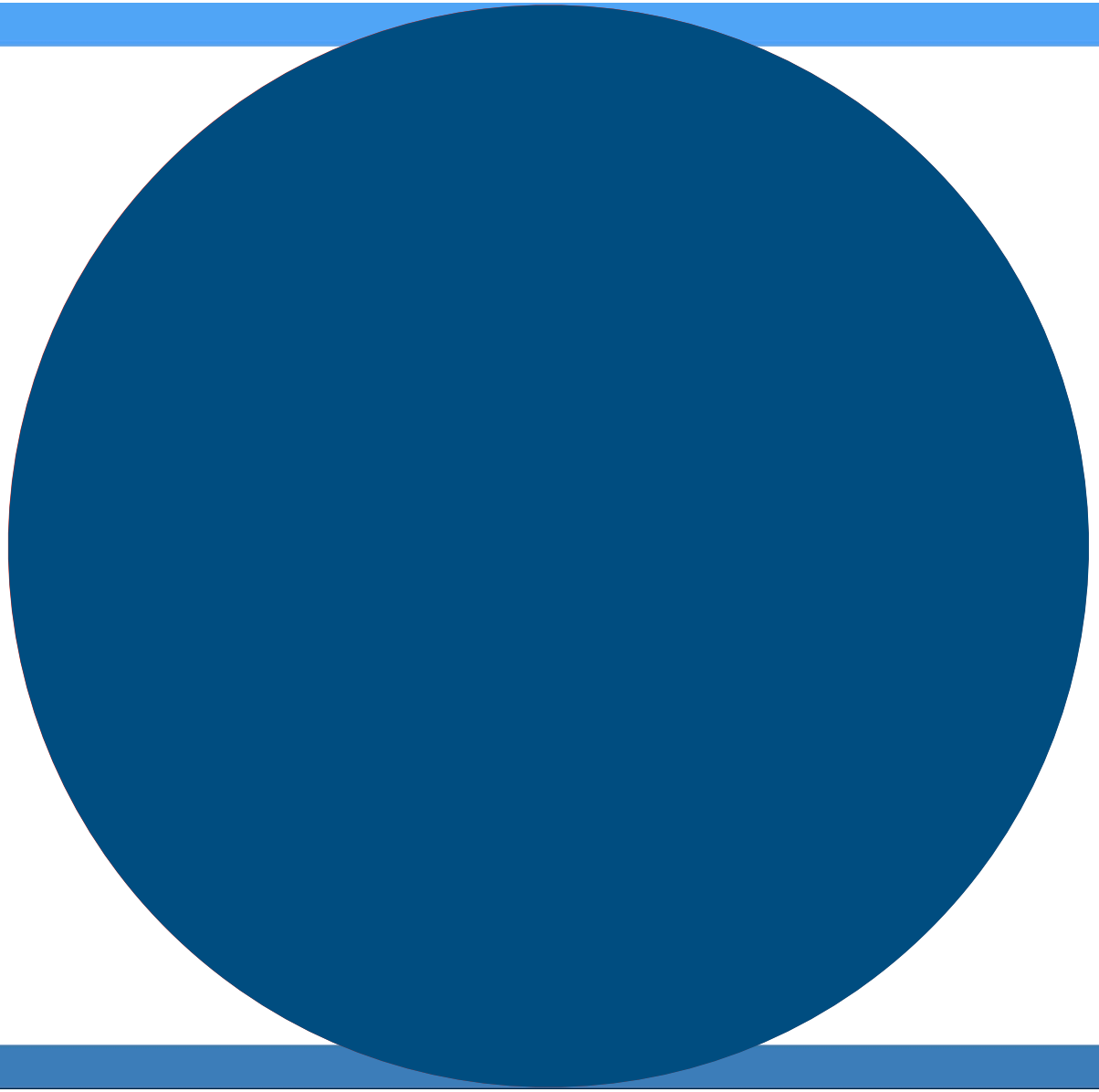




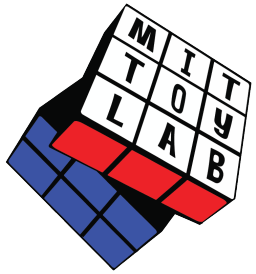






MIT
TOY
LAB

sketchy play



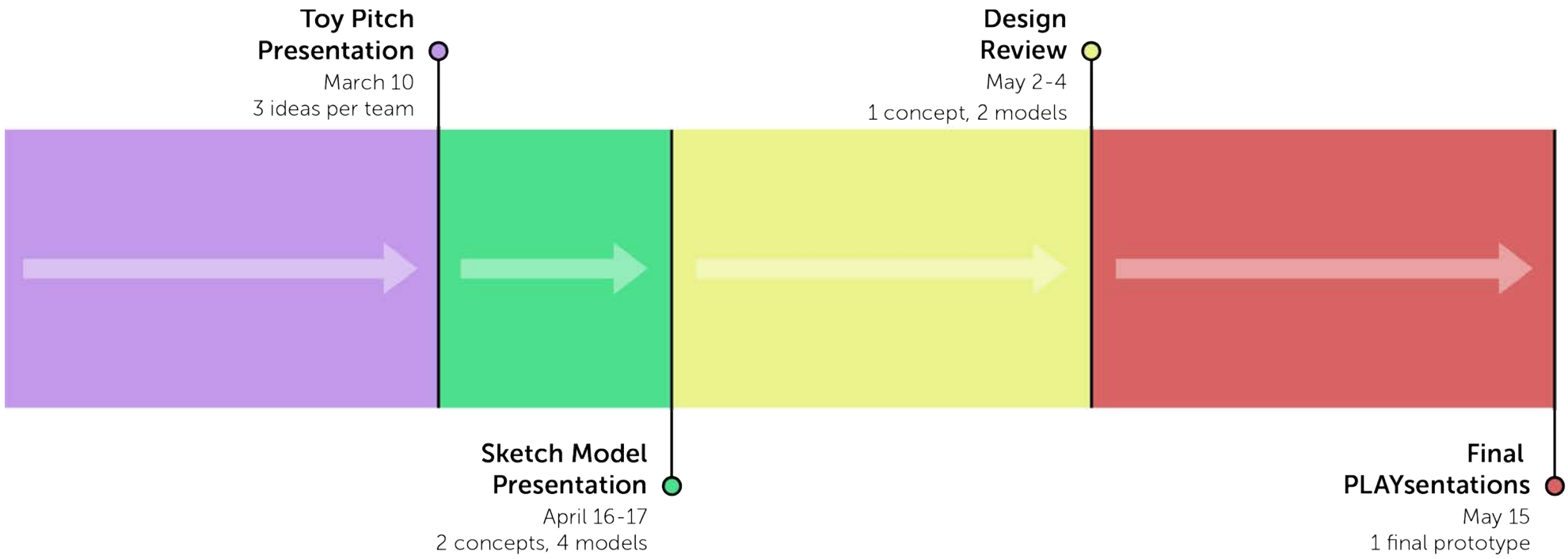
Prototyping!

Communication

Learning

Milestone

Project workflow



What is a sketch model?

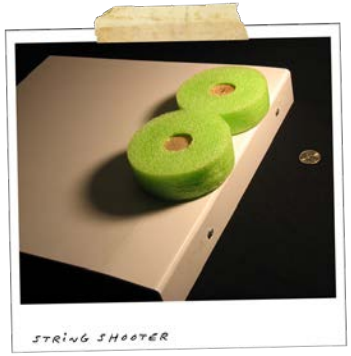
Sketching in 3-D!

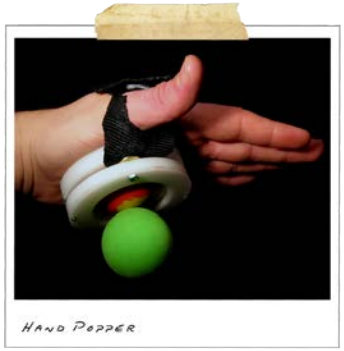
A quick way to explore key questions and further develop the idea

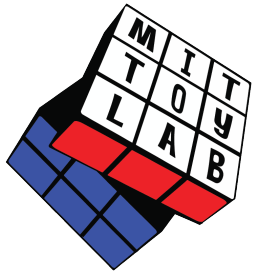
A sketch model explains more than a poster!

What is the play?

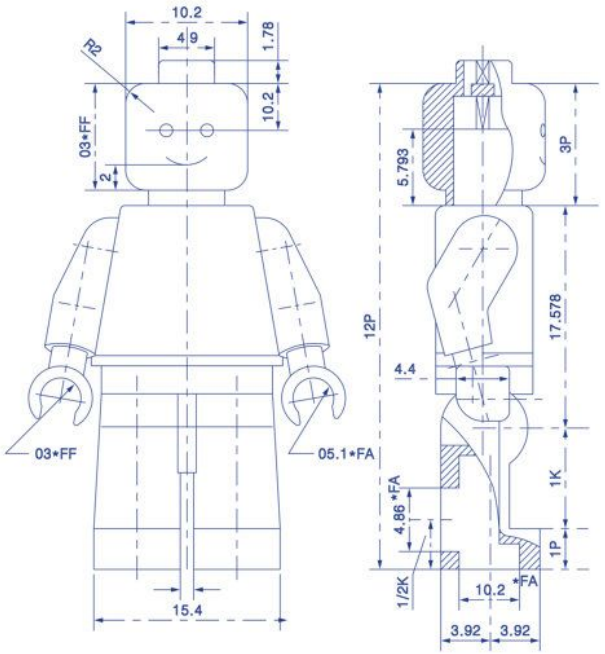
Is it fun?







Dimensions of prototyping

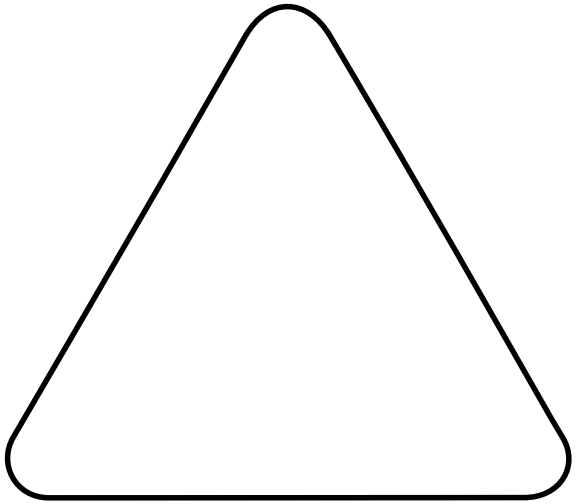


Dimensions of prototyping

plays like

how does it play?

how is it implemented?



looks like

what is the form?

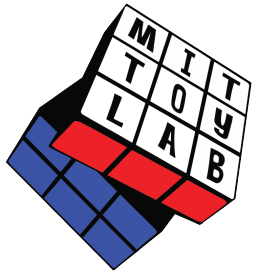
how does it feel?

predicts like

how do we simulate behaviour?

Sketch modeling materials

inexpensive and fast!



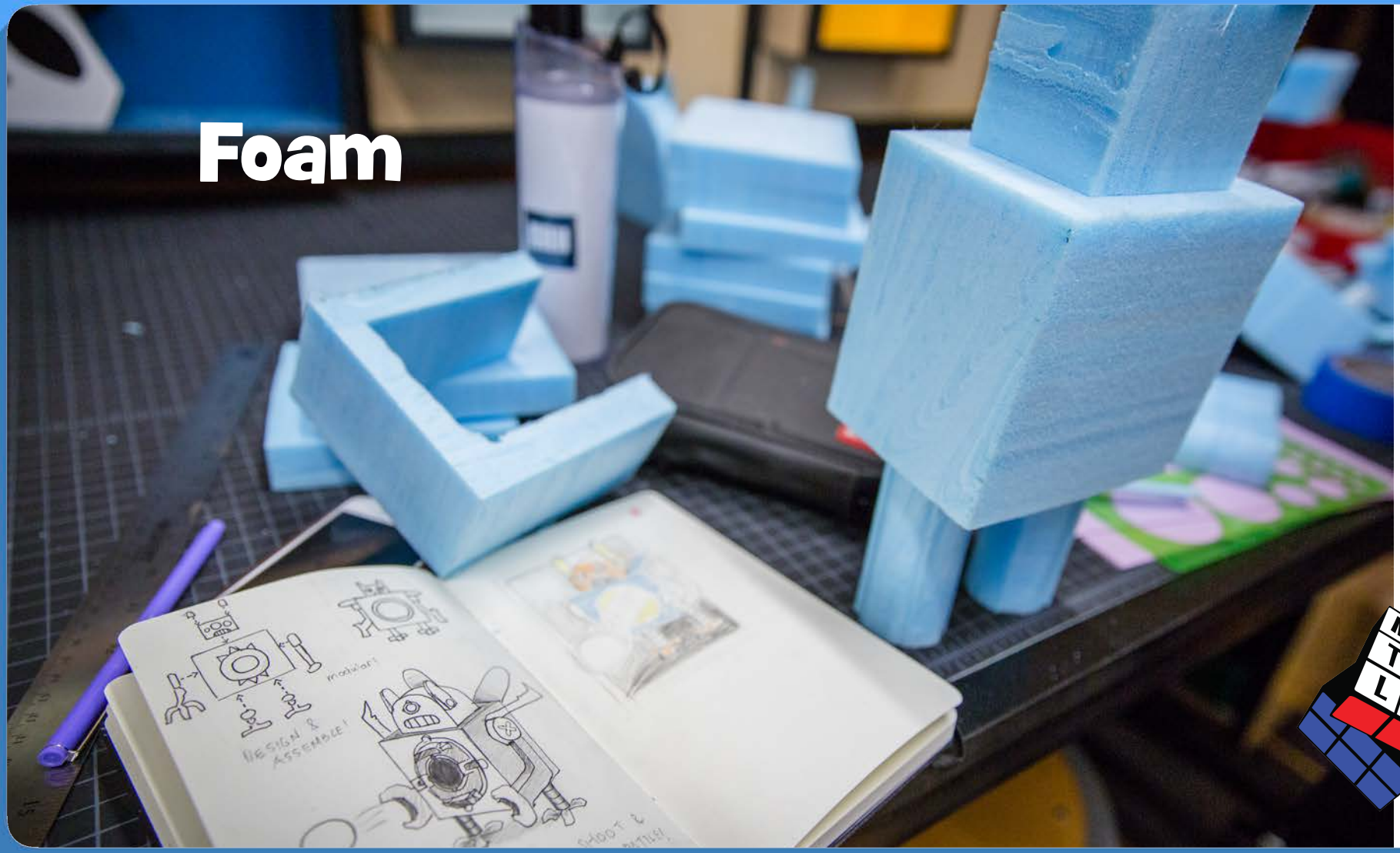
Foamcore

Foamcore

Light and Stiff

Easily cuts with box cutters & attaches with hot glue

Can be used to make large forms

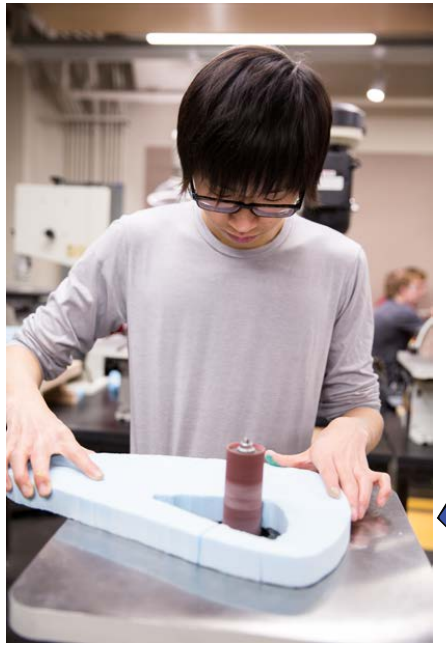

Foam
modular
DESIGN &
ASSEMBLE!

Blue foam

Light and Stiff

Quick to shape into 3D forms

Easily cuts on hot wire cutter



Sketch modeling materials

Inexpensive and fast!

Foamcore

Blue foam

Wood / cloth

Scavenged / repurposed parts

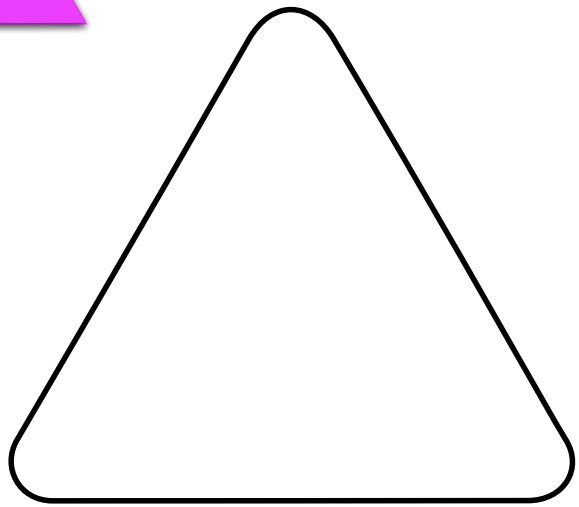
Anything that works!

Dimensions of prototyping

3 concepts!

plays like

what is the play?
how is it implemented?

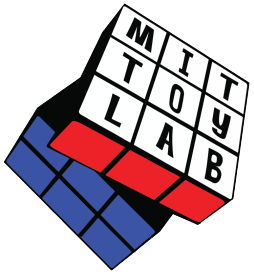


looks like

what is the form?
how does it feel?

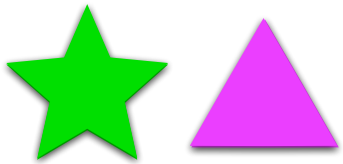
predicts like

what are the physical principles?



our first play testing

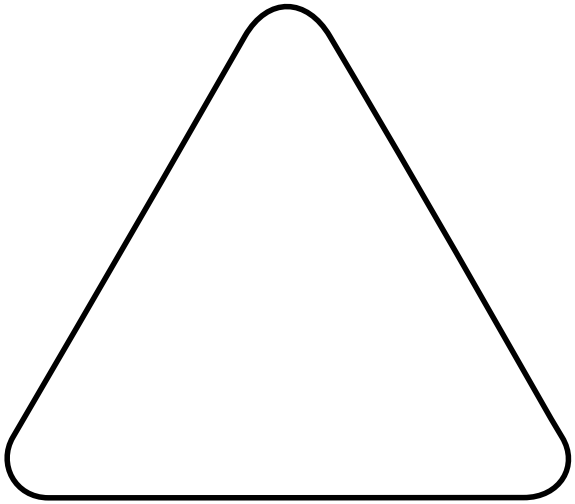
Dimensions of prototyping



2 concepts!

plays like

what is the play?
how is it implemented?

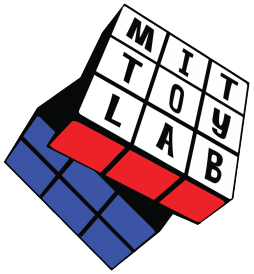


looks like

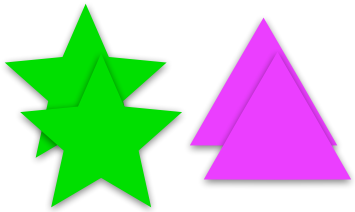
what is the form?
how does it feel?

predicts like

what are the physical principles?



Dimensions of prototyping



plays like

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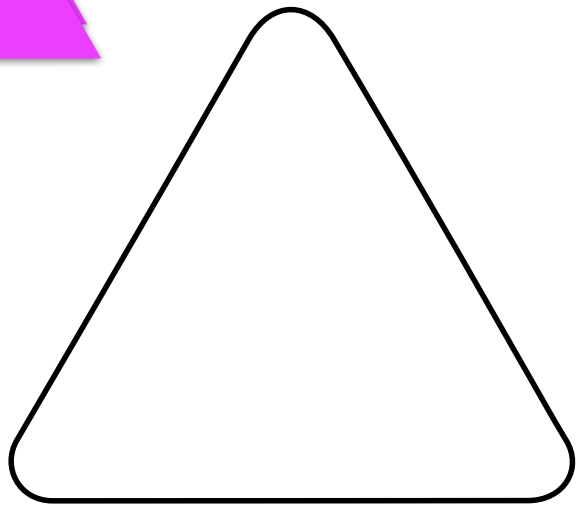
how is it implemented?



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what is the form?
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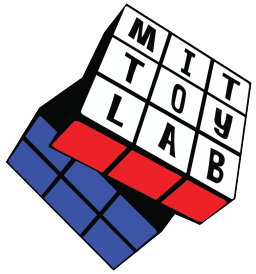
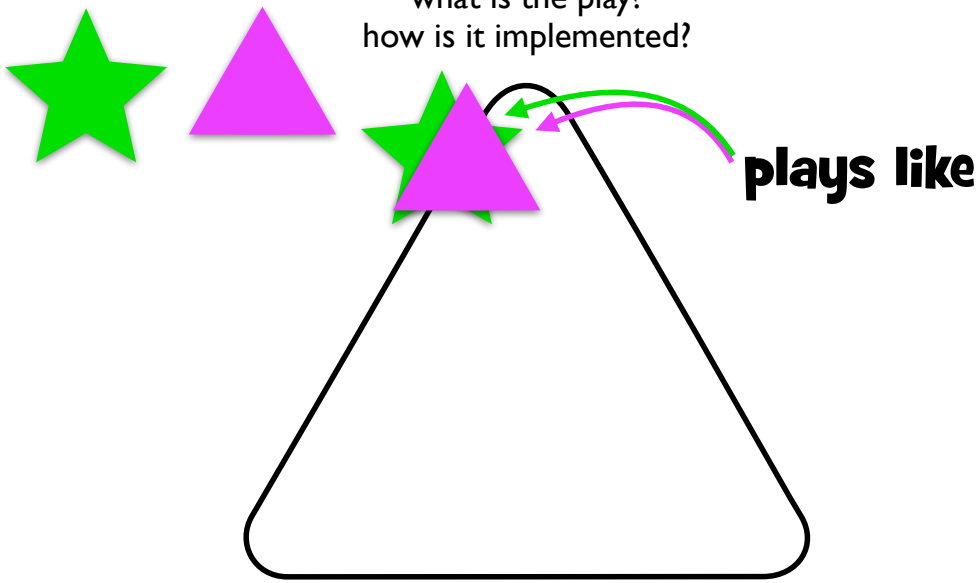
predicts like

what are the physical principles?



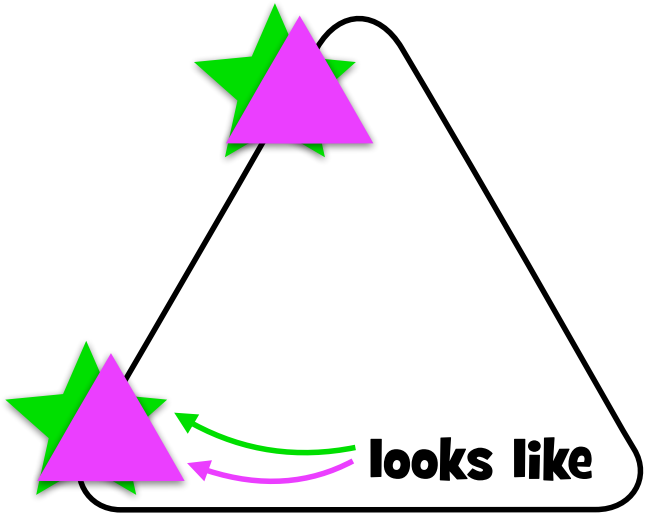
Dimensions of prototyping



Dimensions of prototyping

plays like

what is the play?
how is it implemented?

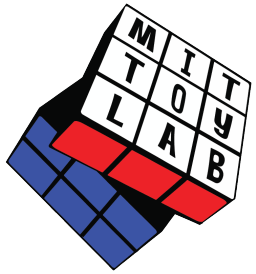


looks like

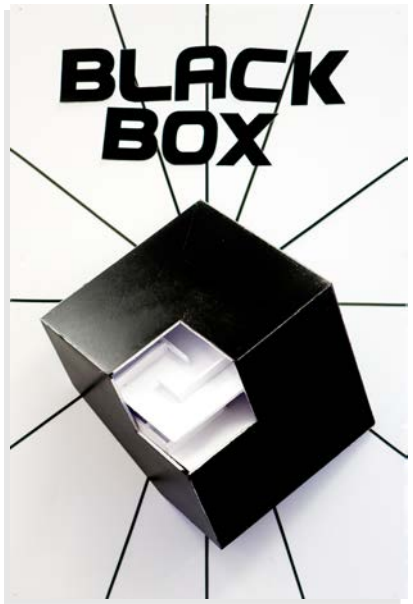
what is the form?
how does it feel?

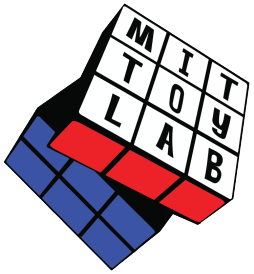
predicts like

what are the physical principles?

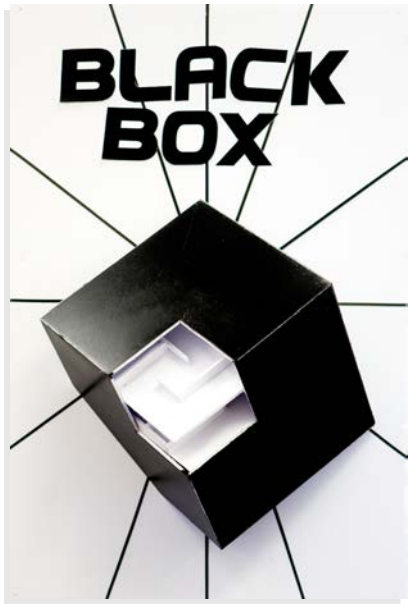


Example!





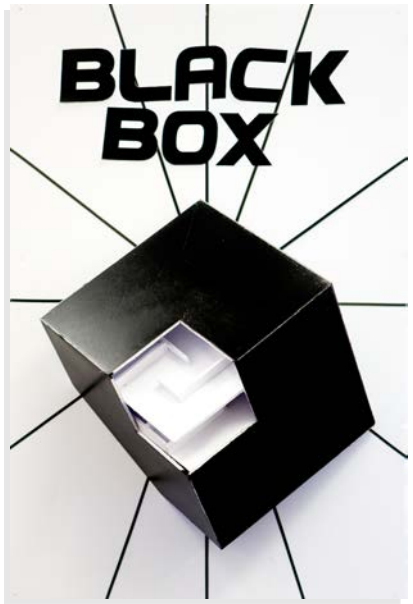
Example!



plays like

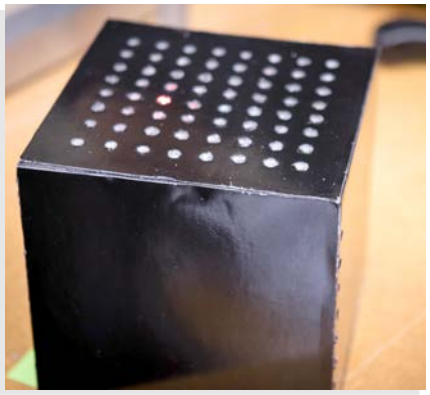
is the toy fun?

Example!



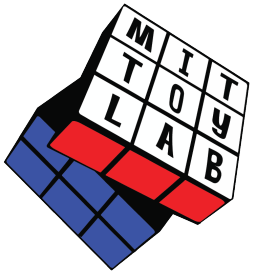
plays like

is the toy fun?



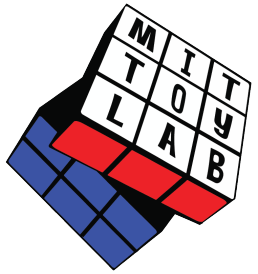
looks like

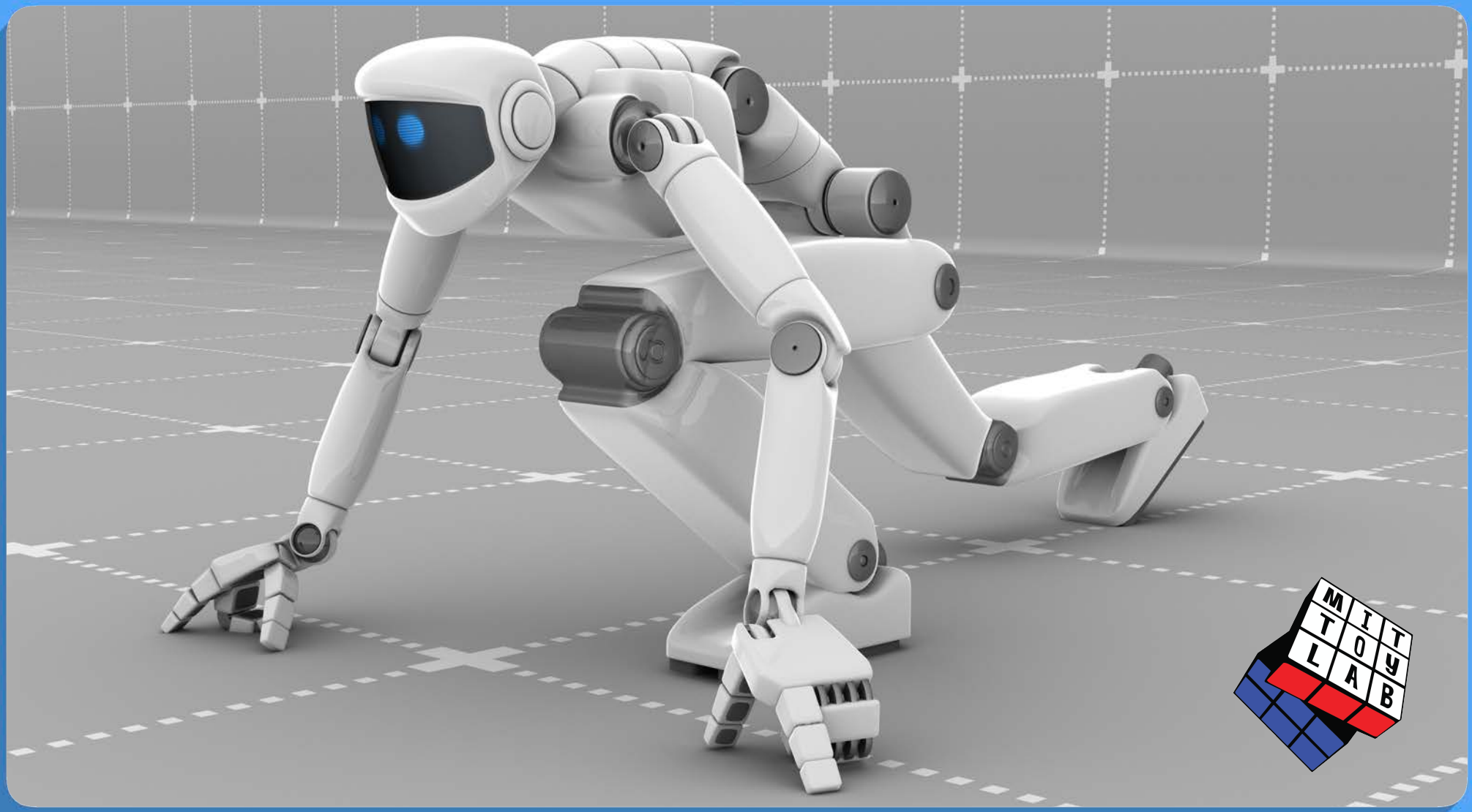
what's the size and look of the toy?



ARE YOU READY?

Are you ready?




M I T
T O y
L A B

It's time to sketch model!

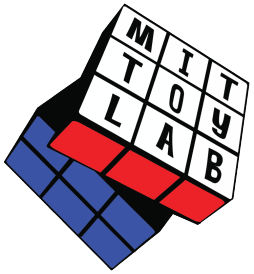
and play test!

In your teams, using what's on your table

Create a plays-like sketch model

Play test the sketch model

For a toy that…



TAPAINT
COLOR
CHAOS

It's time to sketch model!

and play test!

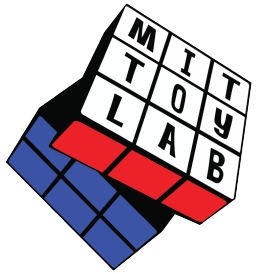
A game with two teams (**red** and **blue**) with at least 2 people per team. Decide how many!

Each team wants to change the other team's colors into their own.

It is a one minute game. The winner of the game is the team with more of their color.

4:35

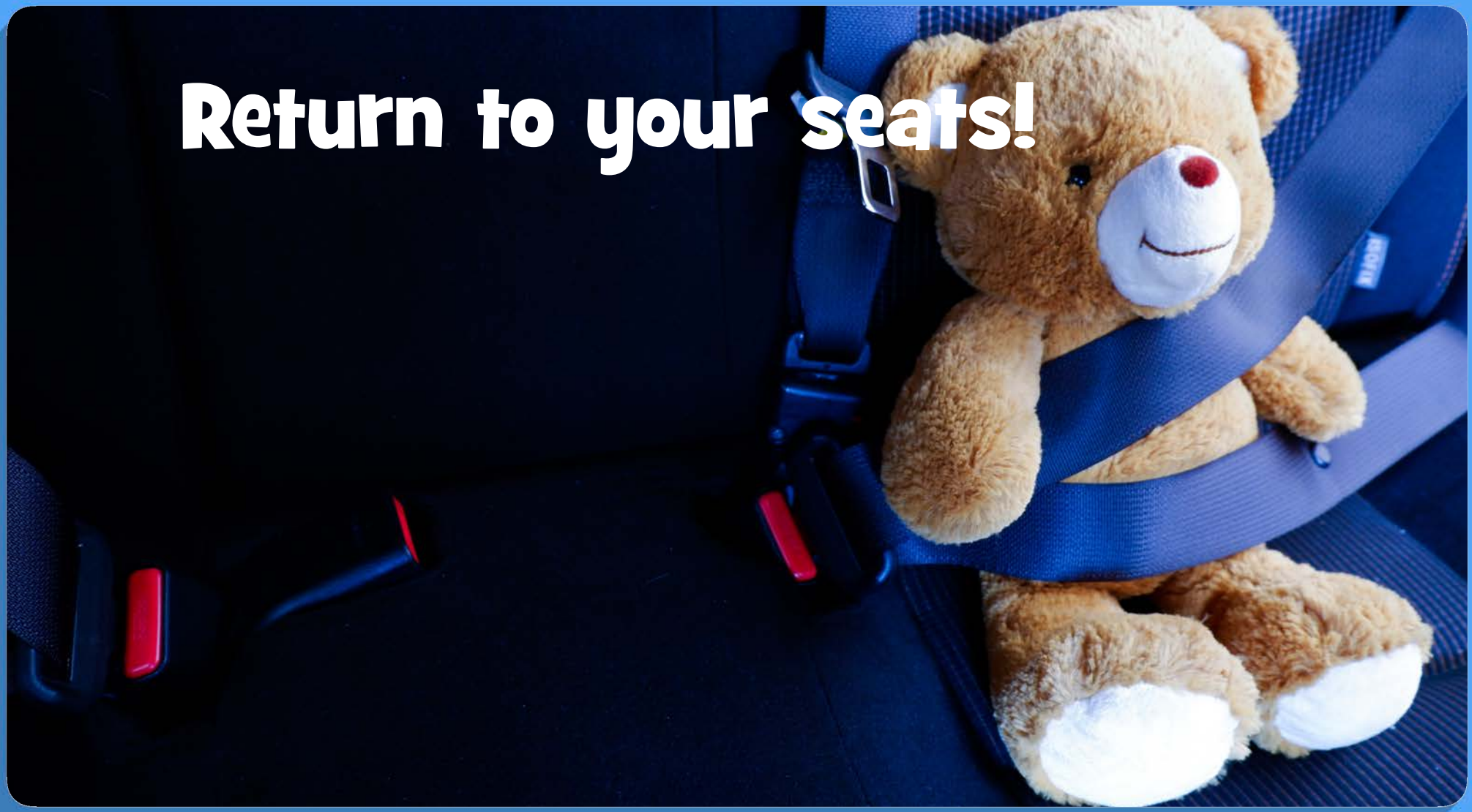
1. Discuss a plan
2. Sketch model the toy
3. Organize for play testing



It's time to sketch model!

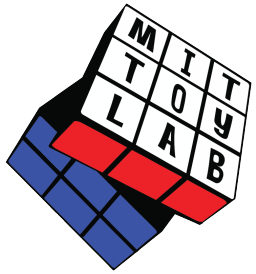
4:35

MIT TOY LAB


Return to your seats!

Now let's play!

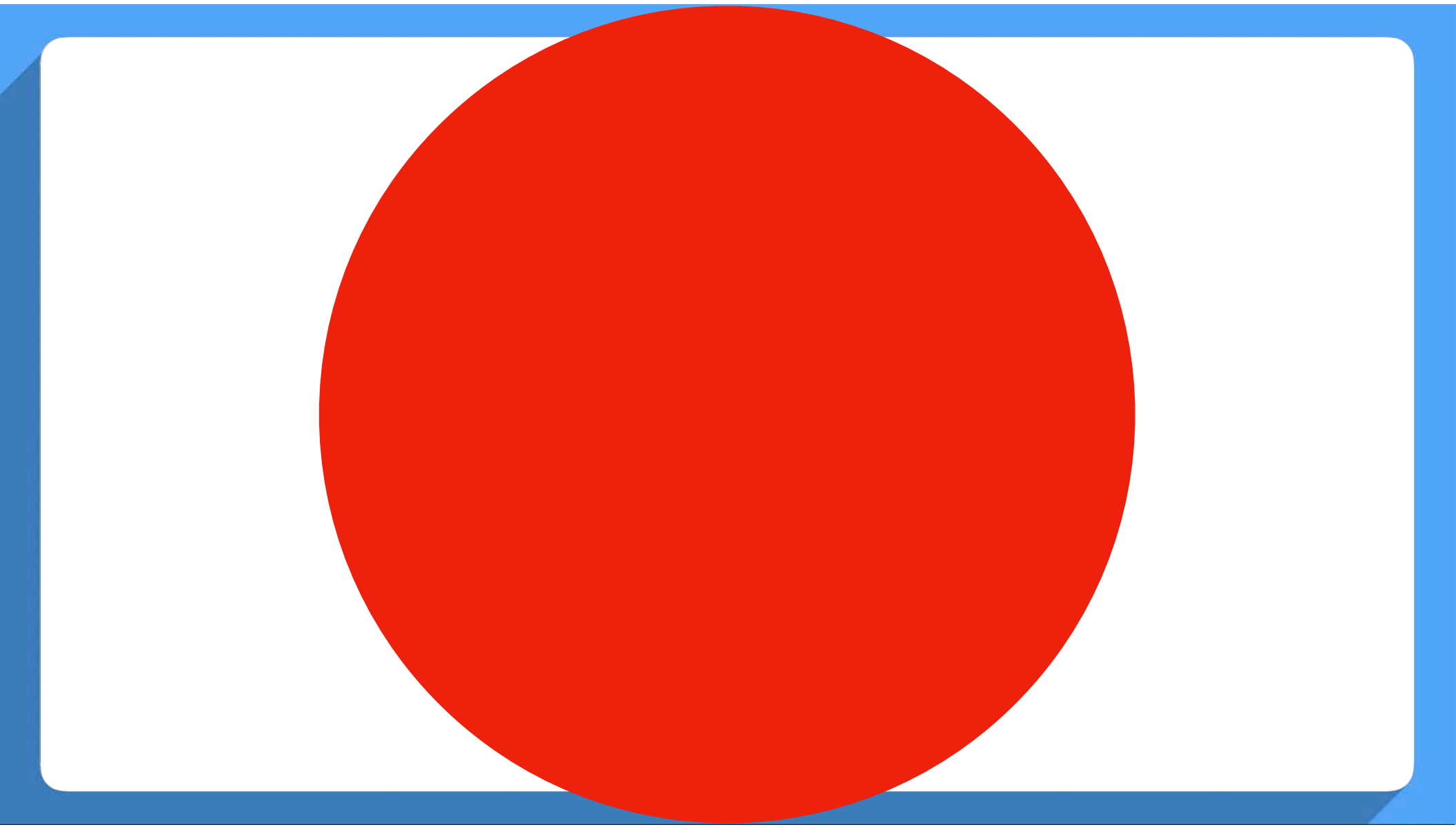
4:50

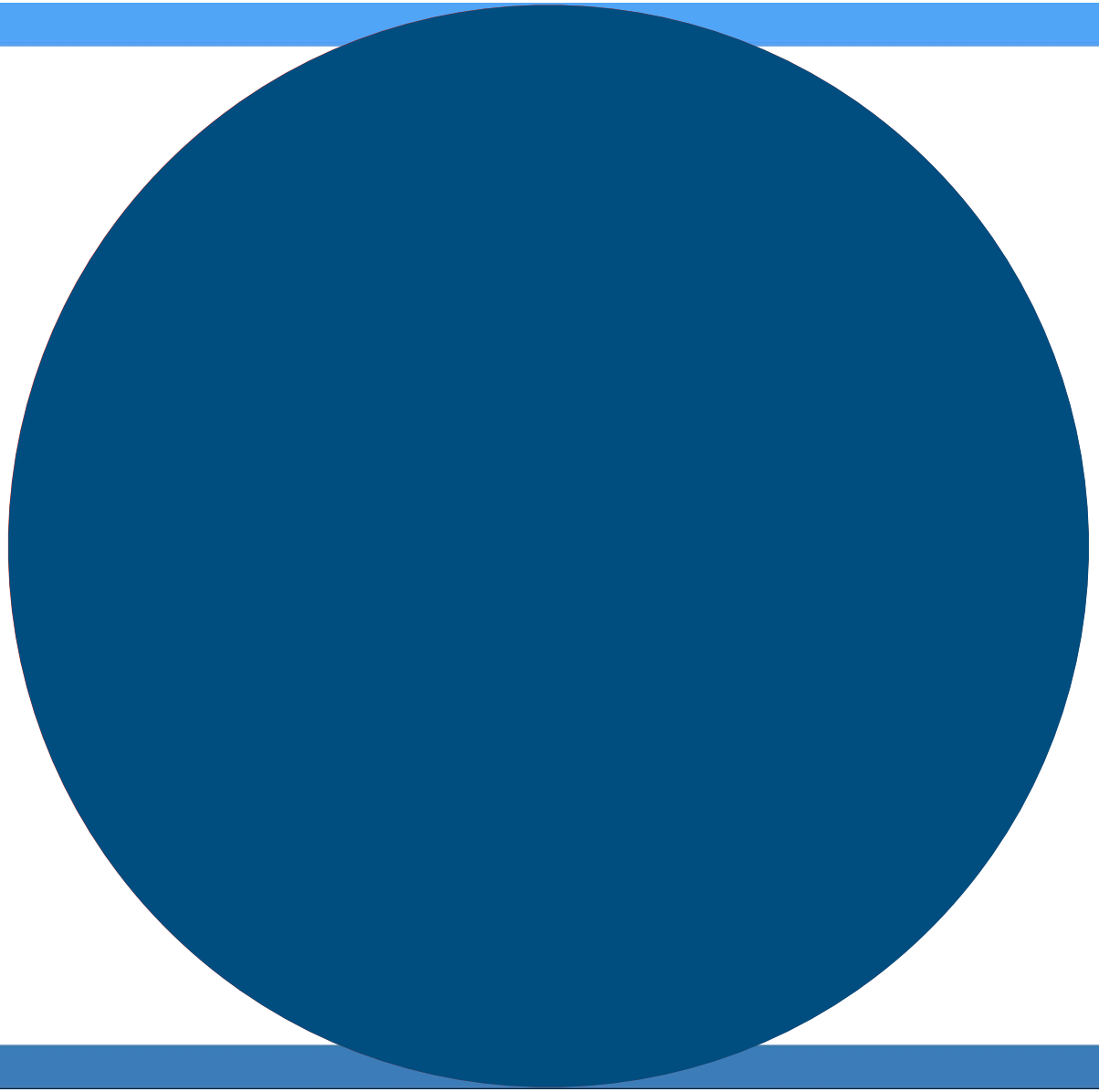


Playtesting

Dome-ination!

MIT
TOY
LAB





M
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200
150
100
50

Play is our brain s favorite way of learning
Diane Ackerman