I don’t get it.
What exactly don’t you get?
It turns from a building into a robot, right?
Precisely.
Well, what’s fun about that?
Well, if you had read your industry breakdown, you would see that our success in the action figure area has climbed from 27% to 45% in the last two years.
I still don’t get it.
What don’t you get?
There’s a million robots that turn into something. This is a building that turns into something. What’s fun about playing with a building? That’s not any fun. This is a skyscraper.
you!
Limericks!

Though all limericks had their good parts, 
So many touched our design hearts, 
The problem we're finding 
is rhythm and rhyming. 
I guess we're not all liberal arts.

2.00b Staff

This is a limerick on play 
I've been trying to think of all day. 
Can't wait 'till I'm done 
'Cause playing is fun. 
Ironically, this poem's in my way.

Peter Williams
Limericks!

There once was a prof named Dave
Who created a toy that’ll wave.
All night, he prototyped
Until he was wiped.
That’s why he had no time to shave.

**Maya Nielan**

Design is a process by which
An idea that begins with a pitch
Is researched and made
In stages, then played
Until it goes off with no glitch.

**Caroline Lader-Smith**
Quiz results

what is **design**?
plan to achieve a desired effect

what is a **toy**?
item that functions as tool for play

what is a **product**?
produced by human effort for selling

Kevin Chen, Megan Flynn, Melissa Klein, Jordan McDermott
Quiz!

1. what is your name?

2. what is toy product design?

3. who is our customer in toy design?

4. what is play?

5. what is the opposite of play?
Who is our customer?

- User
- Purchaser
- Producer
- Retailer

Product use

Influence on product selection
Understanding play

what is play?

a quality of mind
“Play and work are words used to describe the same activity under different circumstances”
- Mark Twain

a natural and learned schematization of life
“A primitive and paradoxical communication, schematic expression, and a succession of disequilibrial bipolar state, with their own rules, sequences and climaxes”
- Brian Sutton Smith, PhD

devvelopmental and cathartic
“It is essential for helping children reach important social, emotional, and cognitive developmental milestones as well as helping them manage stress and become resilient”
- The American Academy of Pediatrics (AAP)
Understanding play

play describes a **state of mind** during an activity that is: 

enjoyable
Understanding play

play describes a **state of mind** during an activity that is:

- enjoyable
- captivating
Understanding play

play describes a **state of mind** during an activity that is:

- enjoyable
- captivating
- superfluous
Understanding play

play describes a **state of mind** during an activity that is:

- enjoyable
- captivating
- superfluous
- intrinsically motivated
Understanding play

play describes a **state of mind** during an activity that is:

- enjoyable
- captivating
- superfluous
- intrinsically motivated
- process focused
Understanding play

play describes a **state of mind** during an activity that is:

- enjoyable
- captivating
- superfluous
- intrinsically motivated
- process focused

**work**  work disguised as play  **directed play**  **guided play**  **free play**  **chore**
Importance of play

**evolutionists**
children learn important survival tools and prepare for adulthood  
physical, social

**psychoanalysts**
play is an emotional outlet (cathartic) and children develop an identity  
emotional, creative

**developmental psychologists**
“It is essential for helping children reach important social, emotional, and cognitive developmental milestones as well as helping them manage stress and become resilient” —American Academy of Pediatrics  
cognitive, social, emotional

**Brian Sutton Smith**
play for the sake of play  
fun and relaxation
Importance of play

UN Convention on the Rights of the Child of 1989. Article 31

1. States Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.

2. States Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.
Classifying play

“Classification is the first step in bringing order into any scientific endeavor” - Michael Ashby
Existing classifications

“Classification is the first step in bringing order into any scientific endeavor” - Michael Ashby

The National Institute for Play
body play
object play
social play
imaginative/pretend play
storytelling play
creative play
attunement play

Consumer Product Safety Commission
active play
manipulative play
make-believe play
creative play
learning play
Scales of play

- **Involvement**
  - Passive
  - Active

- **Social Involvement**
  - Solitary
  - Collective

- **Level of Restraint**
  - Free
  - Ruled

- **Interaction**
  - Mental
  - Physical

- **Gender**
  - Male
  - Female
Scales of play

- **involvement**: passive (question mark) → active
- **social involvement**: solitary (question mark) → collective
- **level of restraint**: free (question mark) → ruled
- **interaction**: mental (question mark) → physical
- **gender**: male (question mark) → female
Scales of play

involvement

passive

active

social involvement

solitary

collective

level of restraint

free

ruled

creation

mental

physical

female
Types of play

- sensory
- fantasy
- construction
- challenge
Types of play

- **sensory**: massage, yoga, music, beer
- **fantasy**: movies, TV, books, tinder
- **construction**: arts and crafts, music, cooking
- **challenge**: games, gambling, trivia, sports, recreation
Types of play
the play pyramid
Types of play
inside the play pyramid

sensory
construction

fantasy
challenge
Types of play
inside the play pyramid

sensory

fantasy

construction

challenge
Types of play
inside the play pyramid

- sensory
- construction
- fantasy
- challenge
Types of play
inside the play pyramid

- sensory
- construction
- fantasy
- challenge
What play is Eggman?
What play is Eggman?

- sensory
- fantasy
- construction
- challenge
# Play Value

potential for play

<table>
<thead>
<tr>
<th>Developmental Benefits</th>
<th>Variety</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>educational</td>
<td>time length of play</td>
<td>enjoyable</td>
</tr>
<tr>
<td>refined motor skills</td>
<td>who can play</td>
<td>captivating</td>
</tr>
<tr>
<td></td>
<td>how it holds up to the test of time</td>
<td>intrinsically rewarding</td>
</tr>
</tbody>
</table>
Affordances

affordance: the action possibilities that limit and guide the user
Affordances
Play Affordances

the action possibilities (or features) of a toy that limit and guide the player

there are an infinite number of affordances for toys, but emphasizing certain affordances is key
Play Affordances

“It is dangerous to pretend we know what a child will do with a toy just from its characteristics alone; children have a way of doing things with toys over and beyond the apparent character of the toy”
-Sutton Smith

“...but we can still design suggestions! A toy is in the mind of the child, a toy product is in the mind of the designer. Ideally, a toy product is the same in the mind of both parties.”
-Kudrowitz
Designing toy products

design
embodiments
Designing toy products

toy products also require **play value** (functional requirements)

functional requirements
Designing toy products

toy products also require **play value** (functional requirements)

**it works!** and it **plays!**

functional requirements
Understanding play!

play with the toy

fill out worksheet

be prepared to possibly give a 30s talk about your toy

remember, a **play affordance** describes a way in which the user is intended to play with the toy
Understanding play!

play with the toy

fill out worksheet

be prepared to possibly give a 30s talk about your toy

remember, a play affordance describes a way in which the user is intended to play with the toy
Labs!

start this week

class and labs:
don’t be late!
Questions?

“We don’t stop playing because we get old; we get old because we stop playing.”

-George Bernard Shaw