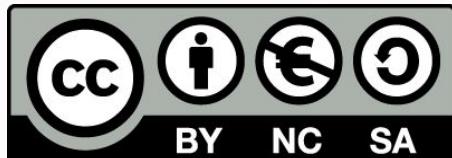


Please use our materials!

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We also humbly request that you email sarah.adams@olin.edu if you use these materials, as we are tracking their impact and how far they travel!



What is this workshop?

¿Cuál es este seminario?



- **Sketching for non-artists**
 - What are design sketches?
 - How can we visually communicate ideas?
 - For those interested in: Drawing, sketching, doodling, (product) design, sculpting, physical hacking
 - About an hour and a half.
-
- **Bosquejando para personas que no identifican como artistas**
 - ¿Qué son bosquejos de diseño?
 - ¿Cómo podemos comunicar ideas visualmente?
 - Para los interesado en: Dibujando, bosquejando, garabateando, diseño (de productos), esculpiendo, “hacking” físico
 - Casi una hora y media.

Design Sketching for Non-Artists

Bosquejos de diseño para los que no se identifican como artistas

Evelyn Kessler (she/her) and Alex Luna (he/him)

Materials

Materiales

- Paper (or something else to draw on)
 - Pencil, pen, or marker
 - Optional: Pen or marker with a different thickness
 - Optional: Household objects to reference
-
- Papel (o una superficie para dibujar)
 - Lapíz, bolígrafo, o marcador
 - Opcional: Bolígrafo o marcadores con diferentes grosores
 - Opcional: Objetos en su casa para referirse en dibujos

Schedule

Programa

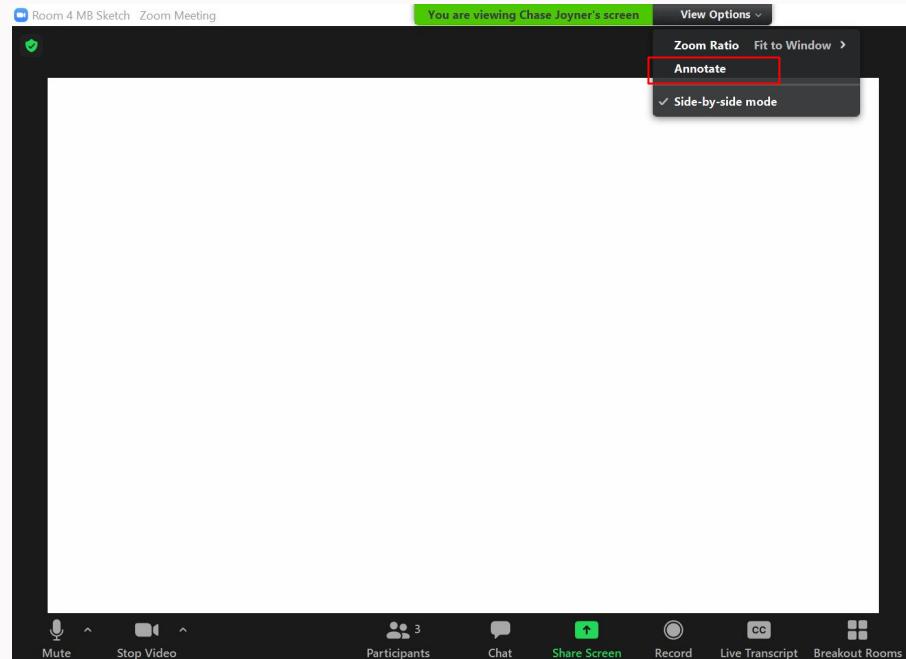
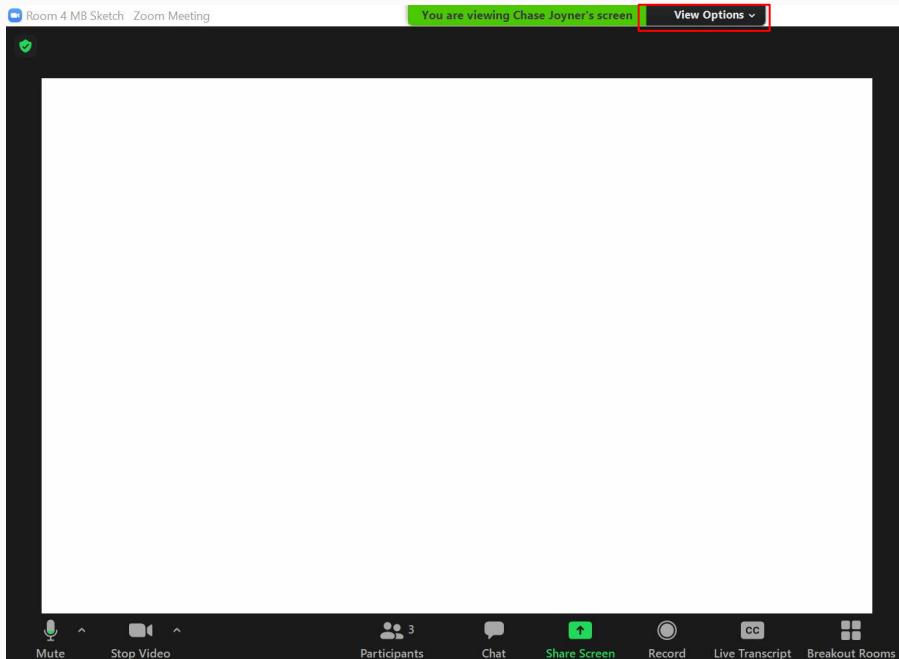
- Intro (5min)
 - Pictionary Game (10min)
 - **Part I: What are Design Sketches? (10min)**
 - Warm up Drawing (10min)
 - Sketch Practice (10min)
 - **Part II: Advanced techniques (10min)**
 - Add to warm-up (10min)
 - Sketch practice (10min)
 - **Sharing (10min)**
 - Feedback :) (5min)
- Introducción (5min)
 - Pictionary Juego (10min)
 - **Parte I: ¿Qué son bosquejos de diseño? (10min)**
 - Actividad Simple de Dibujar (10min)
 - Práctica dibujar (10min)
 - **Parte II: Técnicas avanzados (10min)**
 - Actividad Simple de Dibujar 2 (10min)
 - Práctica dibujar (10min)
 - **Compartamos (10min)**
 - Comentarios :) (5min)

Let's play a game!

¡Vamos a jugar un juego!

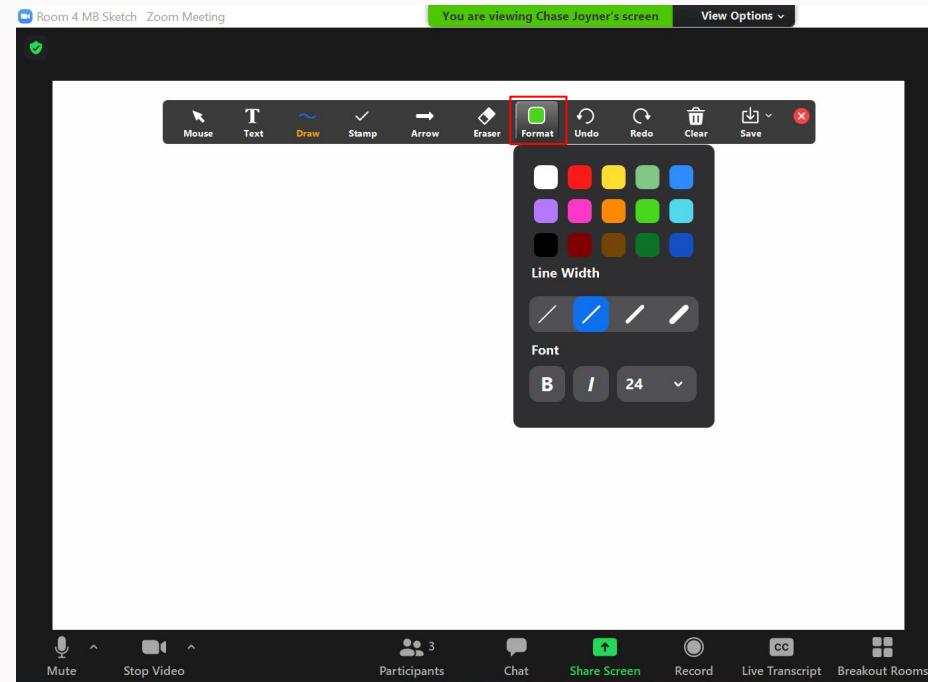
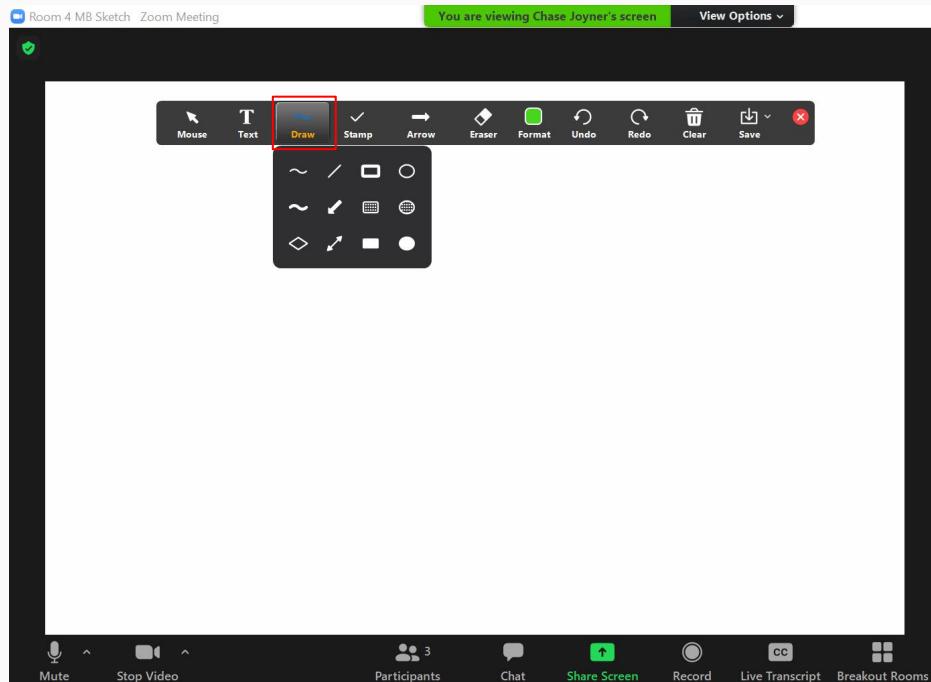
How to Annotate on Zoom on a Computer

Cómo anotar en Zoom si usas una computadora



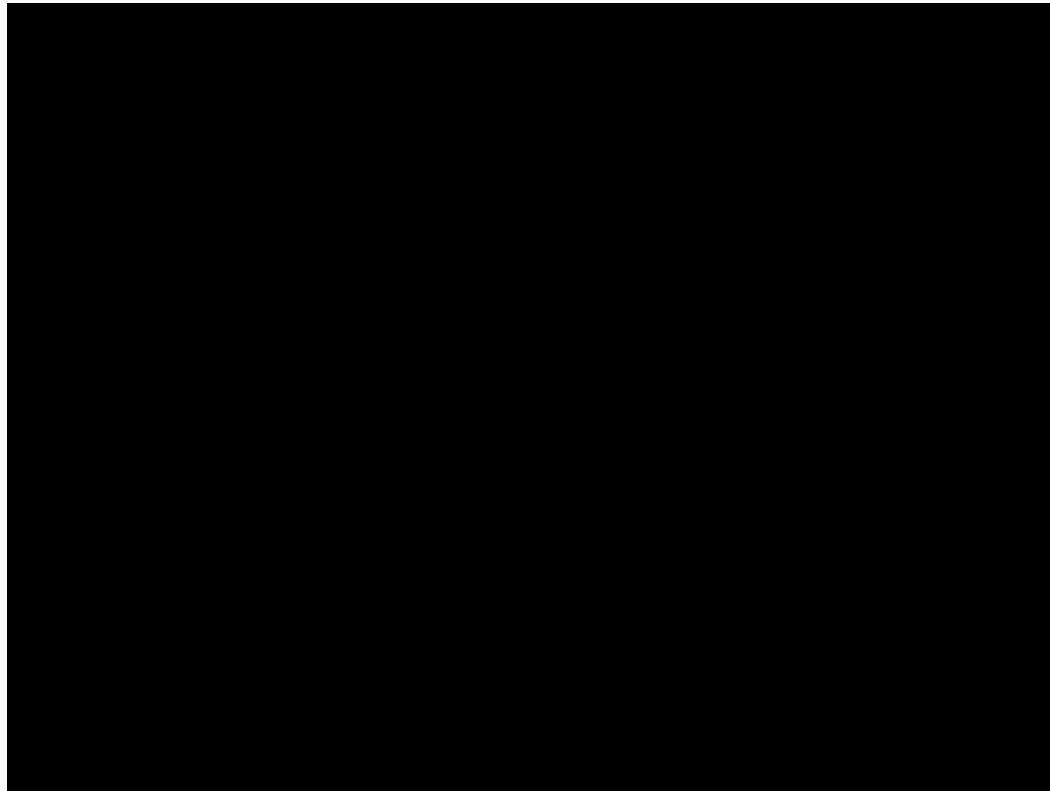
How to Annotate on Zoom on a Computer

Cómo anotar en Zoom si usas una computadora



How to Annotate on Zoom on a Tablet or Phone

Cómo anotar en Zoom si usas una tableta o un teléfono



Let's play a game!

¡Vamos a jugar un juego!

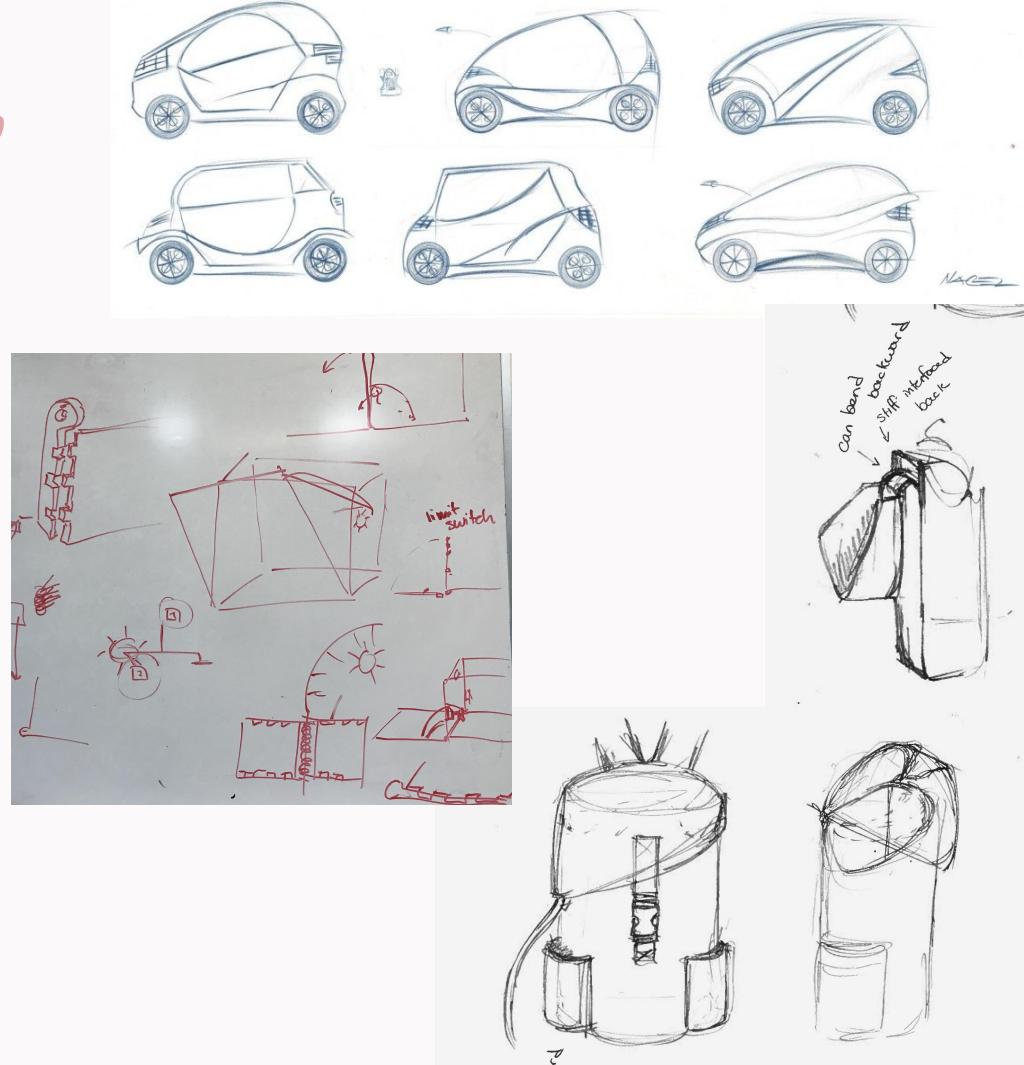
Part I: Design Sketches: What, why, how?

Parte I: Bosquejos de Diseño: Qué, porque, cómo?

What are design sketches?

¿Cuáles son bosquejos de diseño?

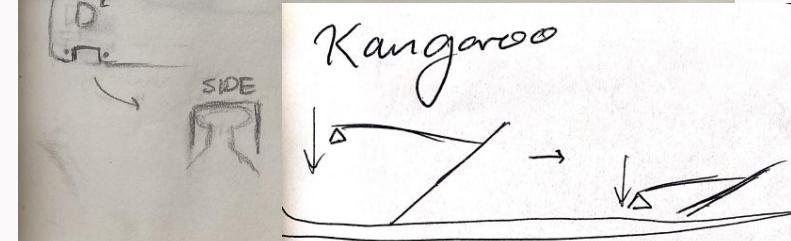
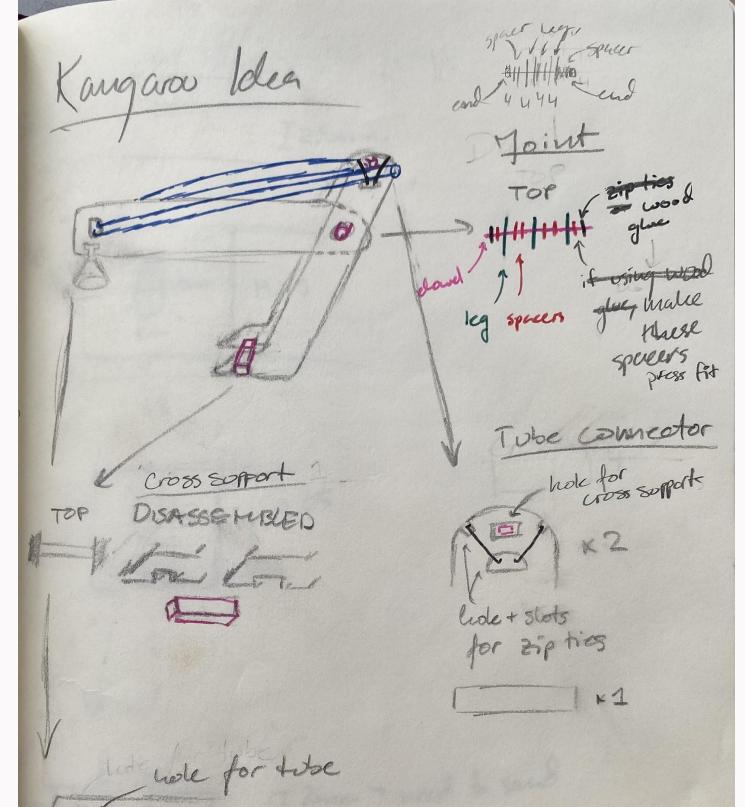
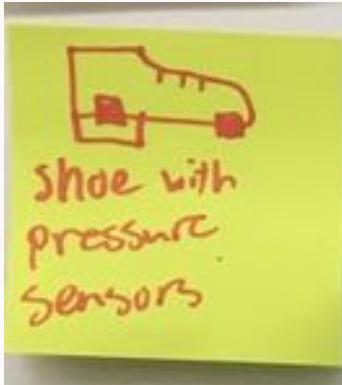
- Key elements of a hypothetical design
 - Simple, fast
 - Made for iteration
-
- Elementos claves de un diseño imaginado
 - Simple, rápido
 - Hecho para iteración



Why design sketches?

¿Porque necesitamos bosquejos de diseño?

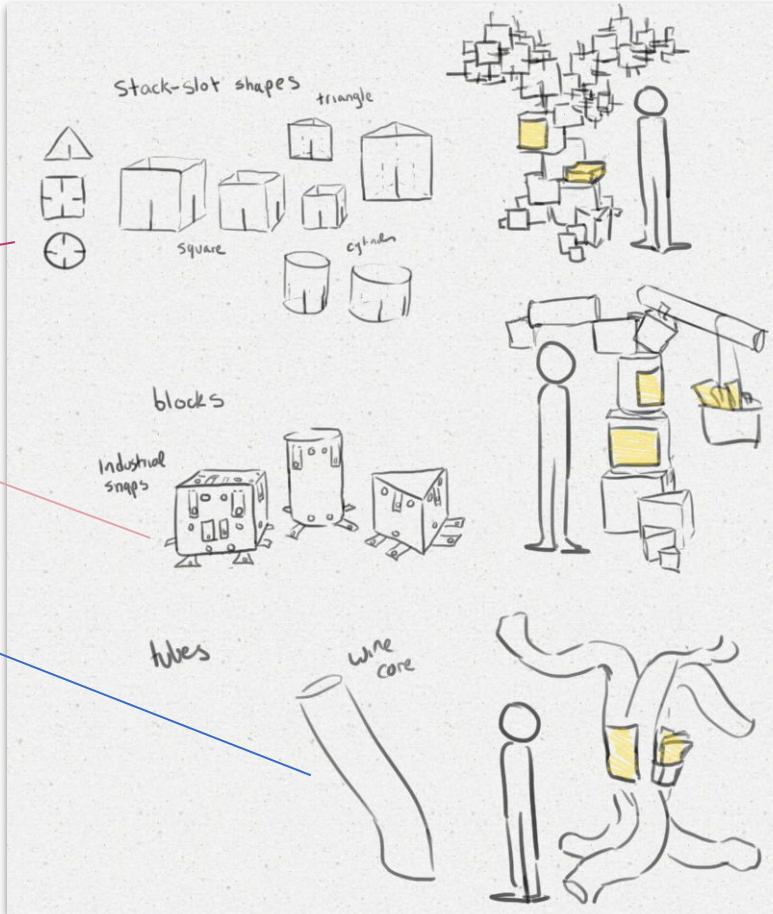
- Get your idea out of your head and onto the page
 - Figure out unknowns and challenges
 - Share ideas with team members
-
- Pone tus ideas en la página
 - Determina cosas desconocidos y desafíos
 - Comparte ideas con miembros del grupo



How do you make a design sketch?

¿Cómo creamos croquis de diseño?

- Priorities:
 - Communication, efficiency
 - Basic shapes
 - Fundamental mechanisms
 - Different views
-
- Prioridades
 - Comunicación, eficiencia
 - Formas básicas
 - Mecanismos claves
 - Vistas diferentes

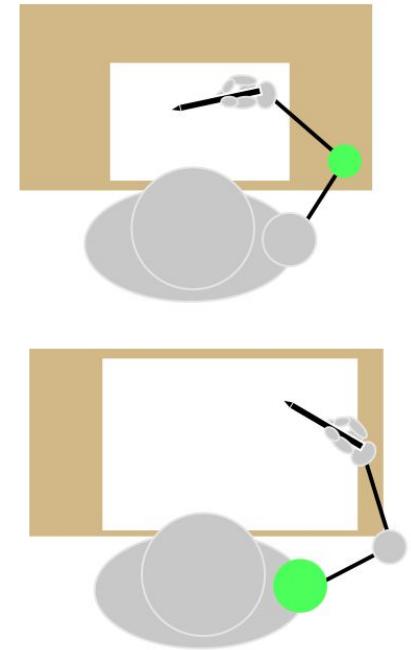
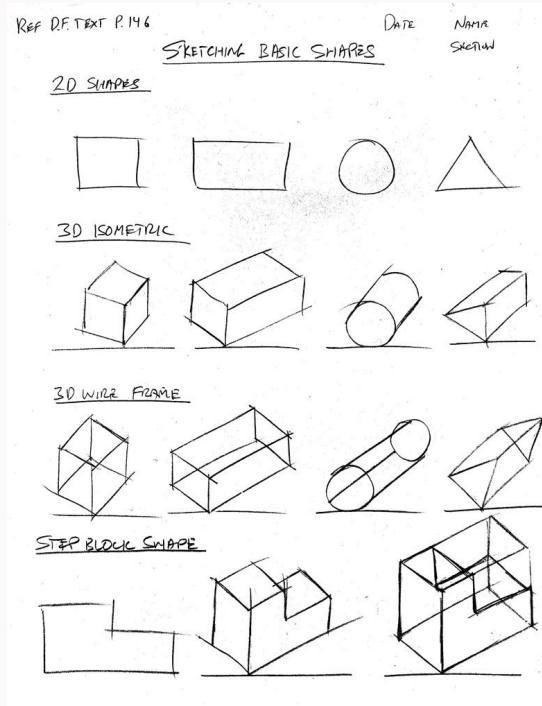


Basic Techniques

Técnicas Básicas

- Draw with your arm, not your wrist!
- Straight lines and curves
 - Don't overthink it. A quick motion will be straighter.
- Basic shapes:
 - Lines, circles, ellipses

- Dibuja con tu brazo, no con tu muñeca
- Líneas rectos y curvas
 - No te preocupes. Un movimiento rápido será mejor.
- Formas básicas:
 - Líneas, círculos, óvalos

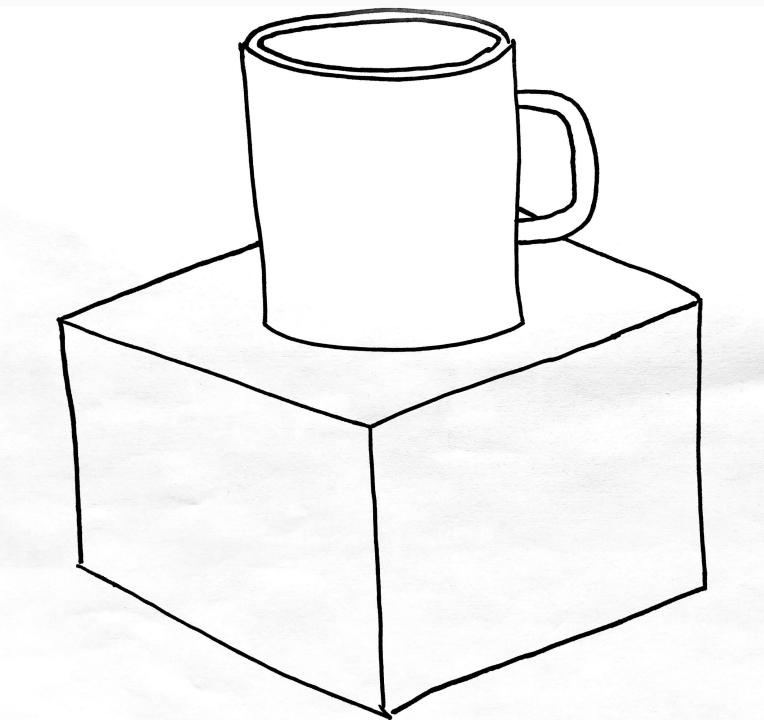


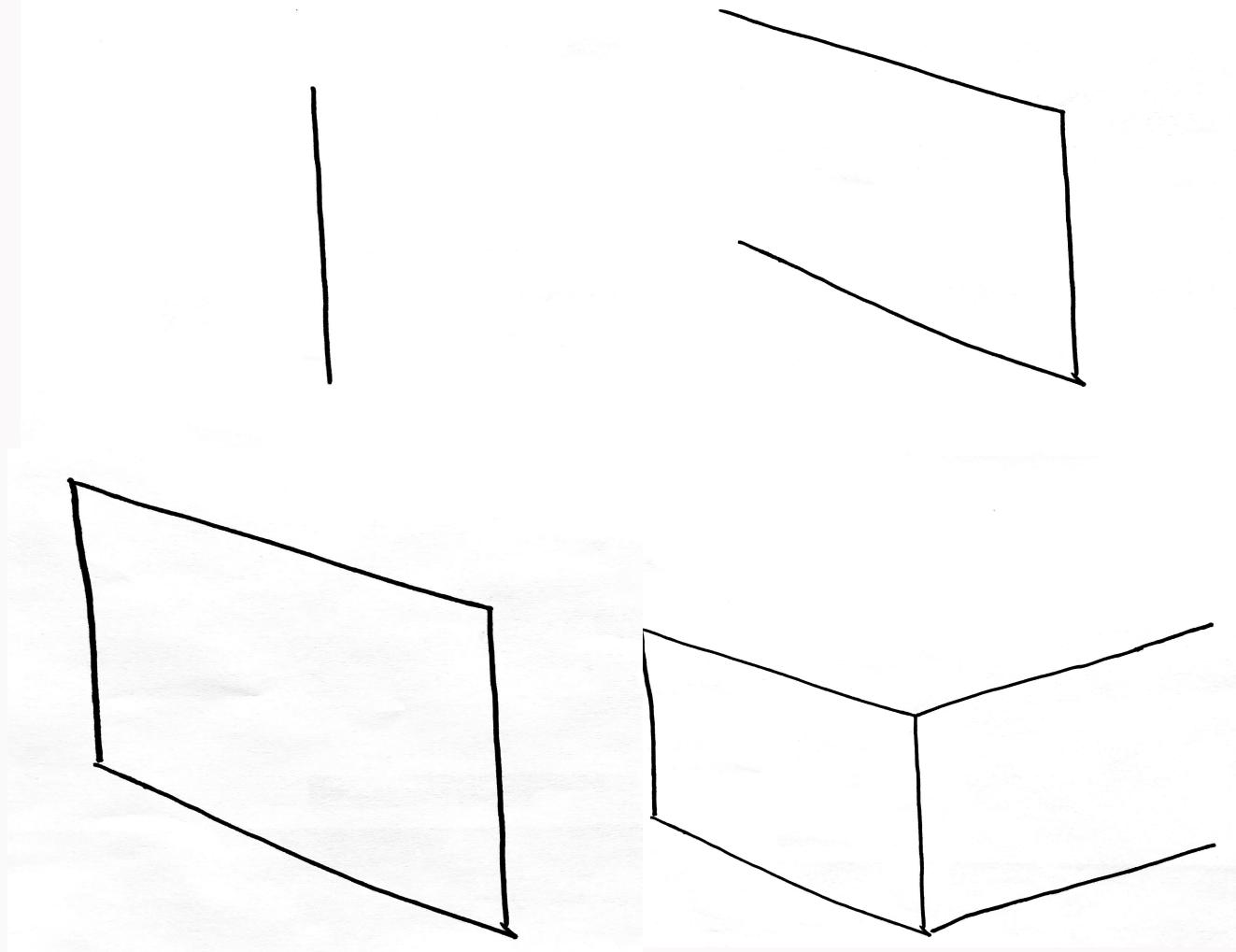
A little warm-up...

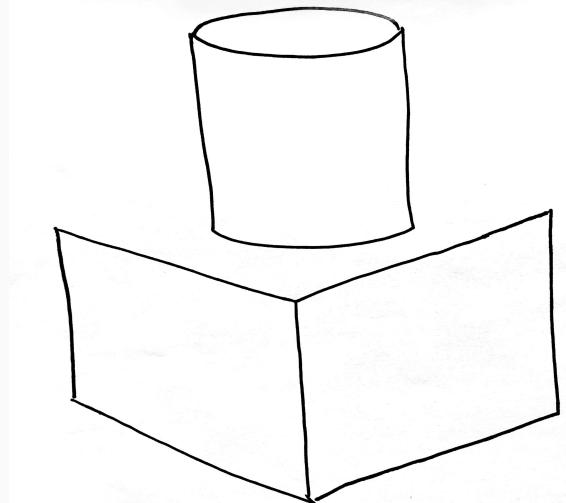
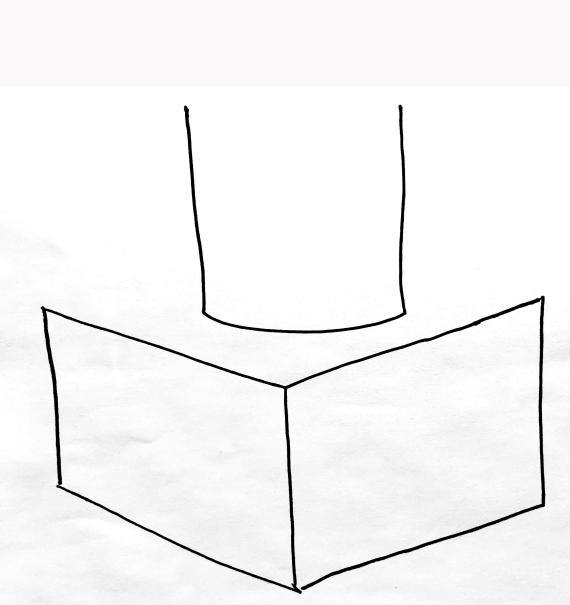
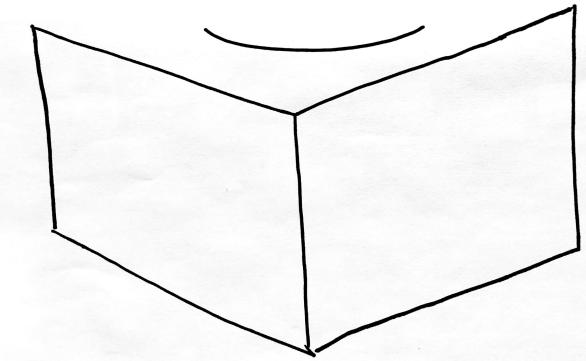
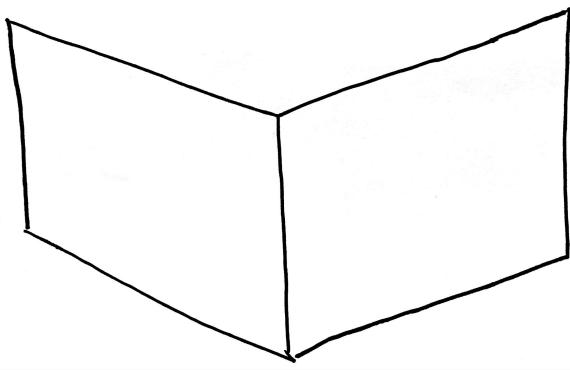
Una actividad simple...

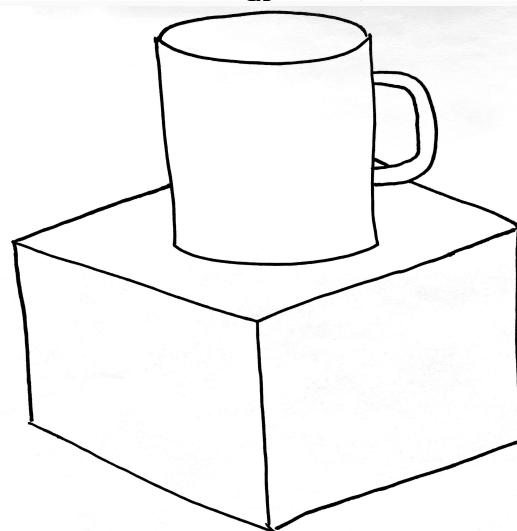
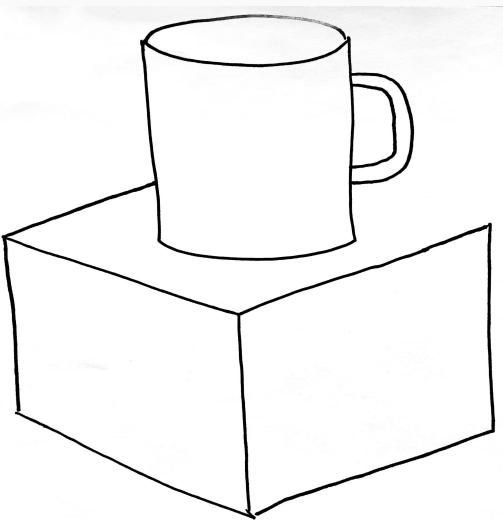
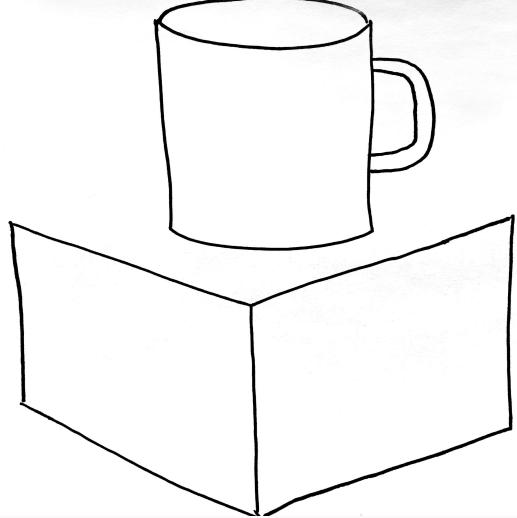
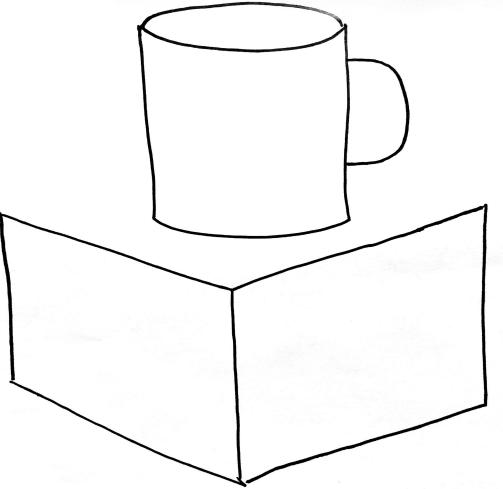
Sketching a coffee mug sitting on a box

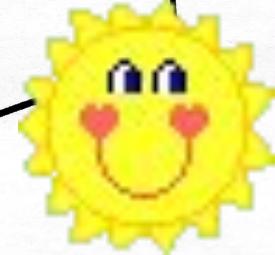
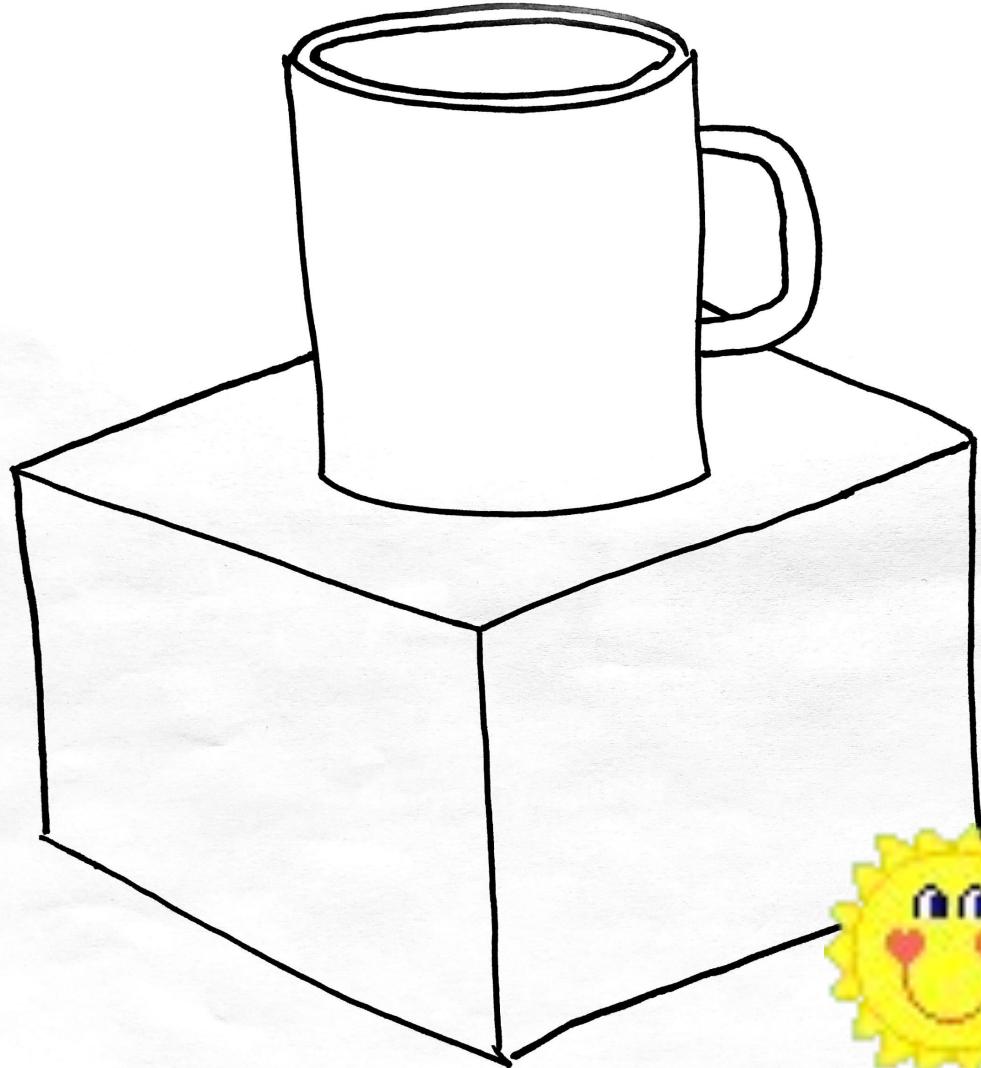
Dibujando una taza de café sentada en una caja











Time to sketch!

jA dibujar!

Some prompts to draw:

Algunas ideas para dibujar:

- What do you use to get ready in the morning?
 - No one uses cars in the future. What do they use instead?
 - What is something that could help you make a sandwich?
-
- ¿Cuál es una cosa que usas para prepararte en la mañana?
 - Nadie usa coches en la futura. ¿Qué se usan en lugar?
 - ¿Qué es algo que podría ayudarte a hacer un sándwich?

Take a Picture of Your Sketch!

¡Toma una foto de tu dibujo!

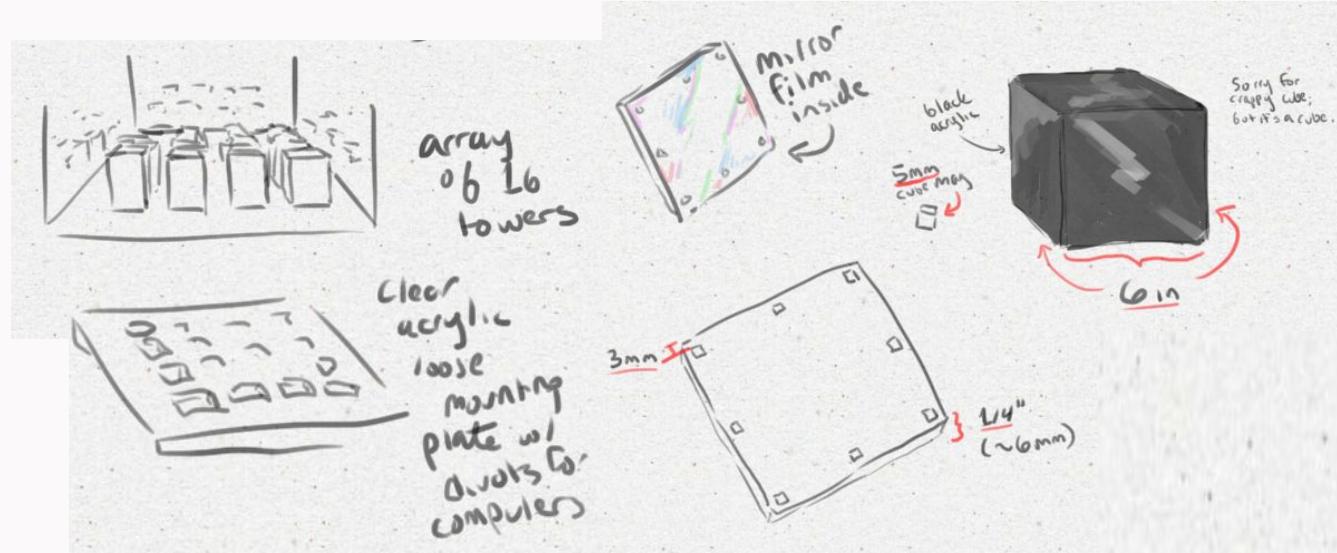
Part II: Sketching Techniques: Gallery Sketches

Parte II: Técnicas de Dibujo: Dibujos de la Galería

Gallery Sketches: Designs for refining and sharing

Dibujos de la galería: Diseños para refinar y compartir

- For presenting with the broader community
- Filling in details
- “Prettier” and “cleaner” than initial sketches
- Para presentar con la gente
- Llenar los detalles
- Más “lindo” y “limpio” que los bosquejos iniciales



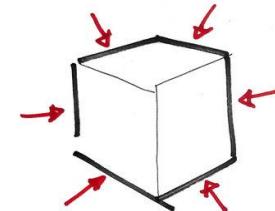
Techniques:

Técnicas:

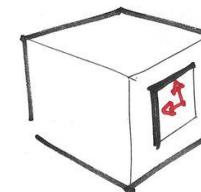
- Multiple line weights
 - Isometric perspective
 - Repetitive elements
 - Tracing
 - Color
 - Dimensions and scale
 - Motion
-
- Líneas de grosores diferentes
 - Perspectivo isométrico
 - Elementos repetitivos
 - Calcando
 - Colores
 - Dimensiones y la escala
 - Movimiento



① OUTER EDGES



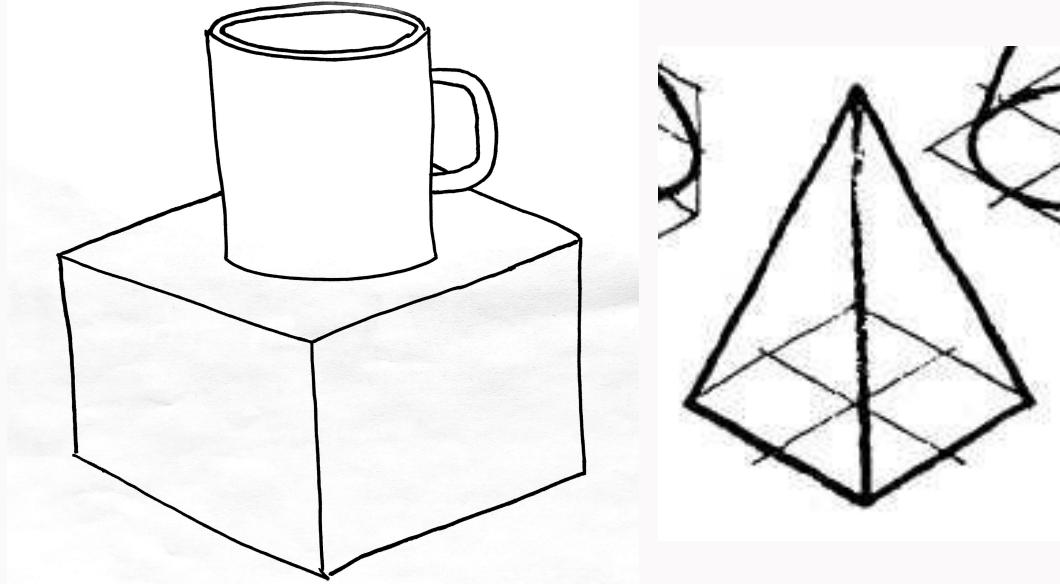
② EDGES YOU CAN REACH AROUND



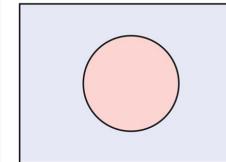
Techniques:

Técnicas:

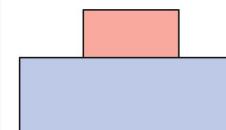
- Multiple line weights
- Isometric perspective
- Repetitive elements
- Tracing
- Color
- Dimensions and scale
- Motion



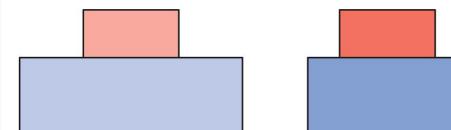
Orthographic and isometric projections of an object



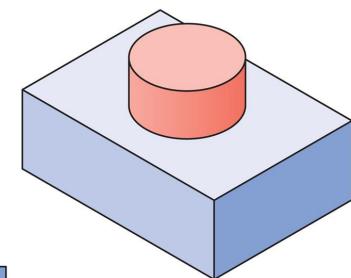
top view



front view



side view

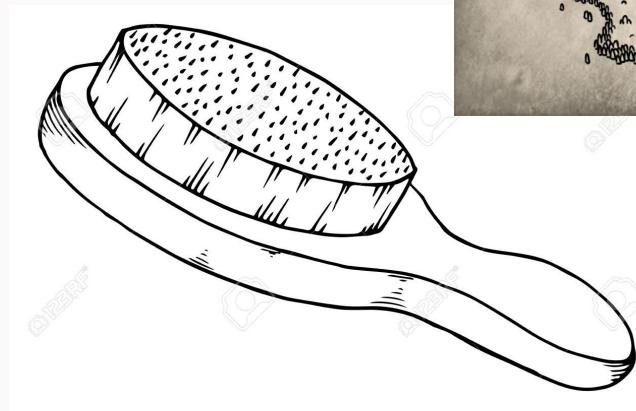
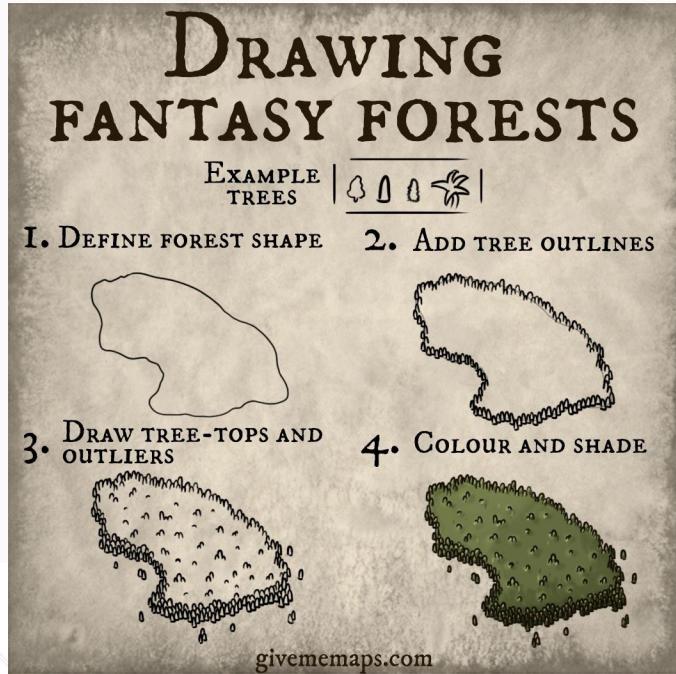


3-dimensional isometric projection

2-dimensional orthographic projection

Techniques: Técnicas:

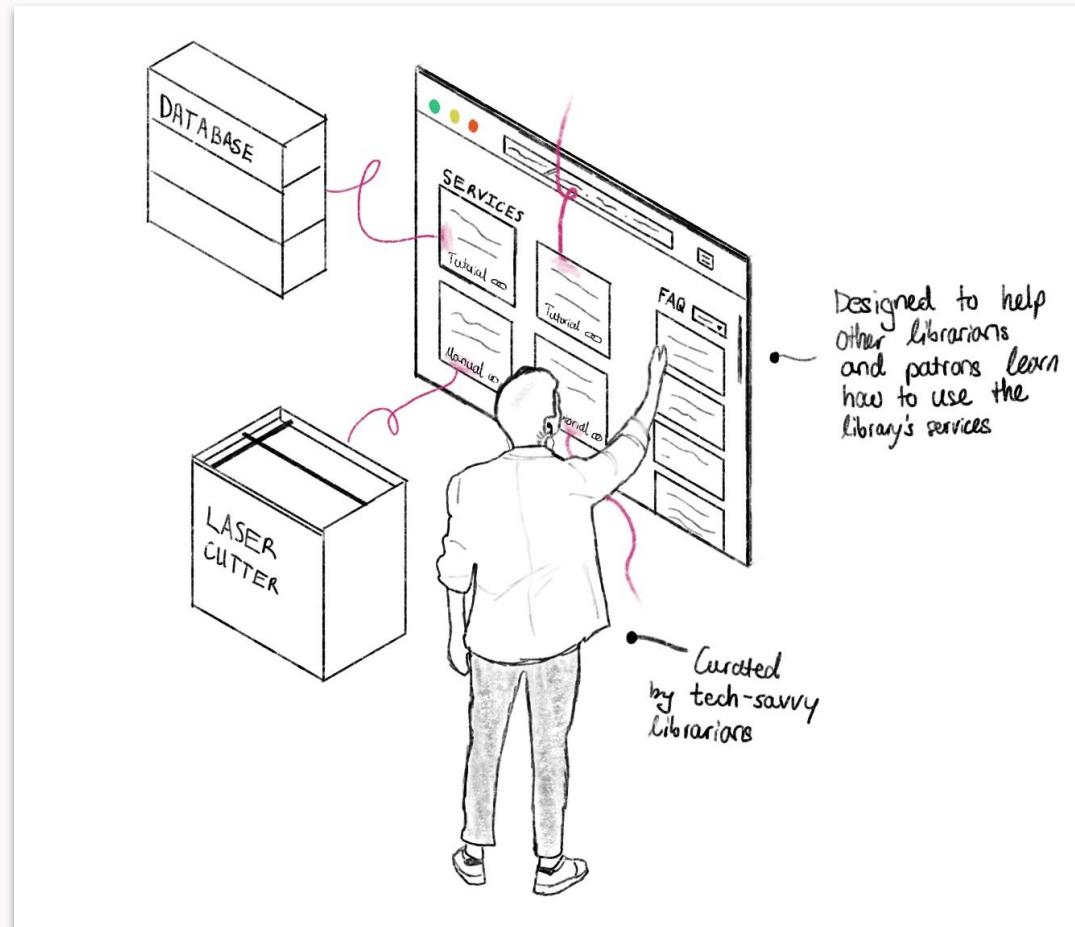
- Multiple line weights
 - Isometric
 - Repetitive elements
 - Tracing
 - Color
 - Dimensions and scale
 - Motion
-
- Líneas de grosos diferentes
 - Perspectivo isométrico
 - Elementos repetitivos
 - Calcando
 - Colores
 - Dimensiones y la escala
 - Movimiento



Techniques:

Técnicas:

- Multiple line weights
 - Isometric
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 - Calcando
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 - Movimiento



Techniques:

Técnicas:

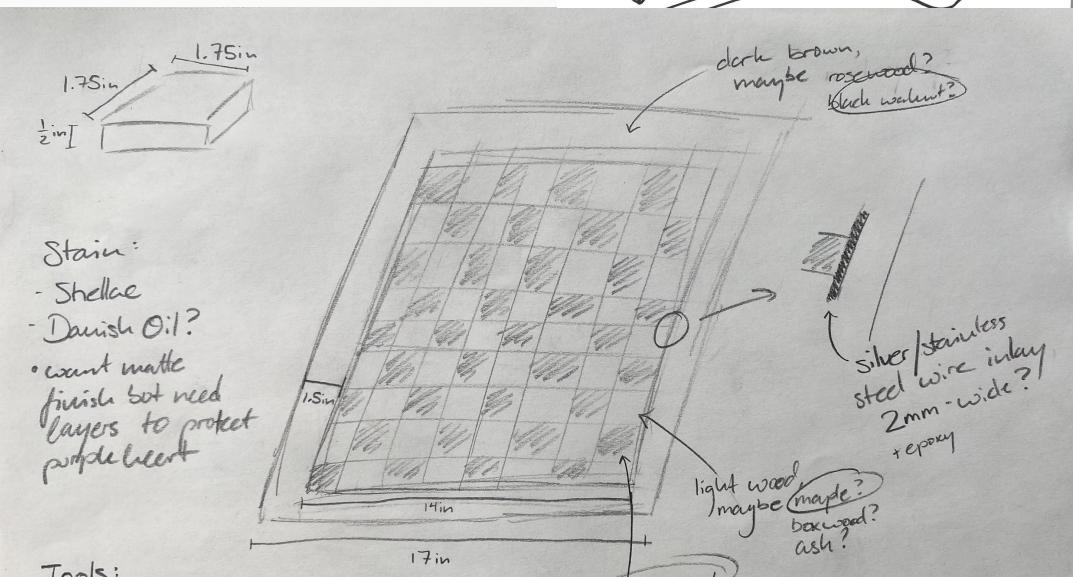
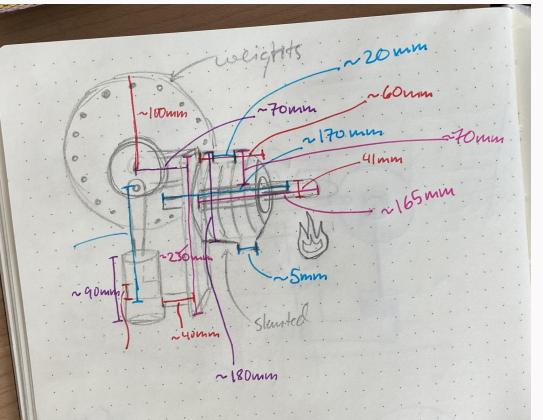
- Multiple line weights
 - Isometric
 - Repetitive elements
 - Tracing
 - **Color**
 - Dimensions and scale
 - Motion
-
- Líneas de grosores diferentes
 - Perspectivo isométrico
 - Elementos repetitivos
 - Calcando
 - **Colores**
 - Dimensiones y la escala
 - Movimiento



Techniques: Técnicas:

- Multiple line weights
- Isometric
- Repetitive elements
- Tracing
- Color
- Dimensions and scale
- Motion

- Líneas de grosos diferentes
- Perspectivo isométrico
- Elementos repetitivos
- Calcando
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- Movimiento

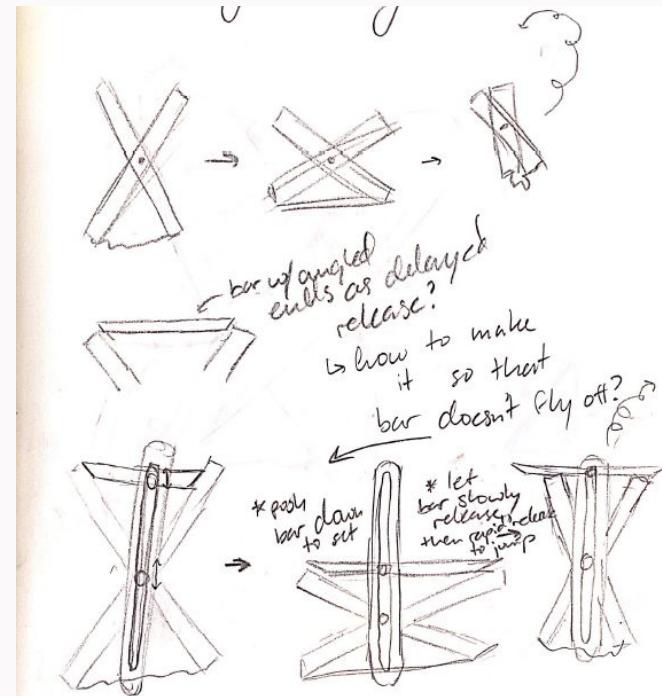
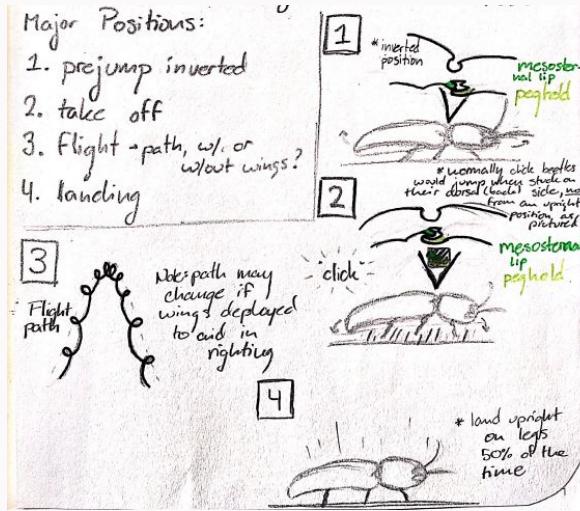


Damage-resistant flexible cabling & tubing

Design: A tie wrapped loosely in an anisotropic material is stiffer than ~~the~~ facilitates knot formation & damage reduction
Scale: longer
Anisotropic outer layer is more tense circumferentially than longitudinally
Hoses (kink-proof)
core: wiring or tubing carrying current
undersea cables
resistant to bites
child iniously stamps to no avail

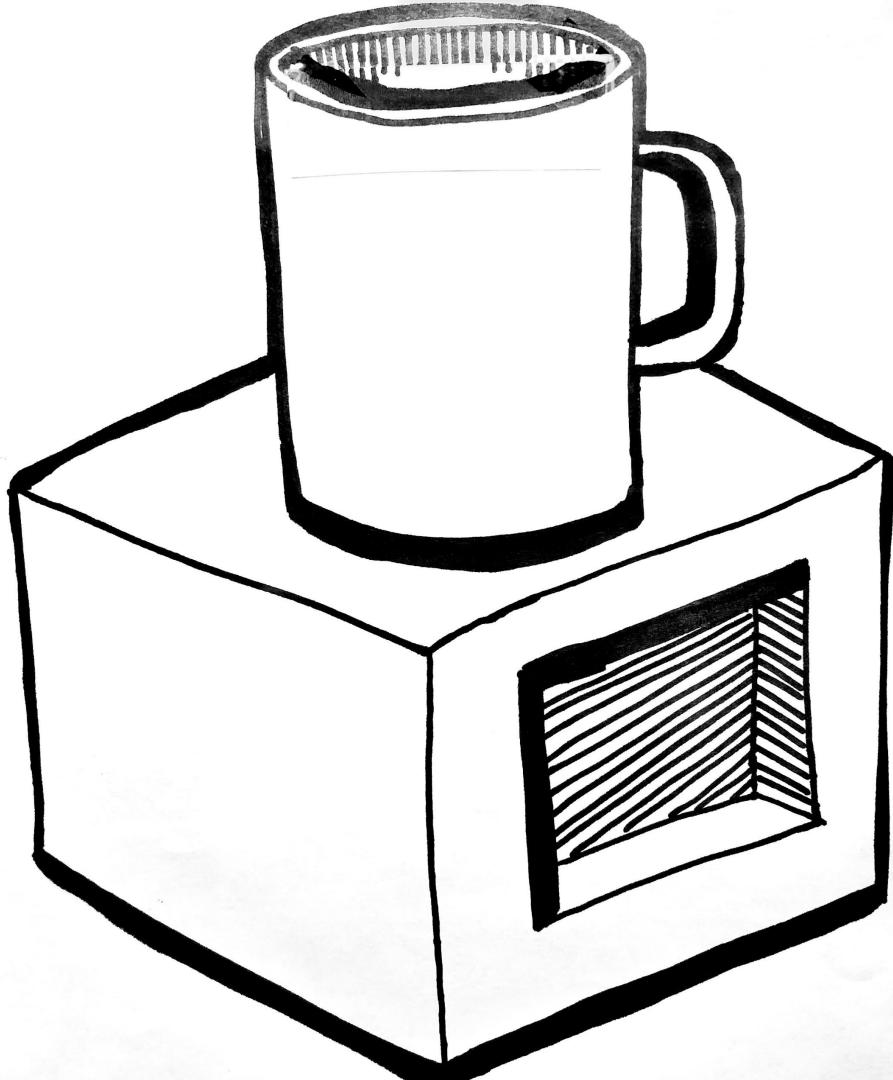
Techniques: Técnicas:

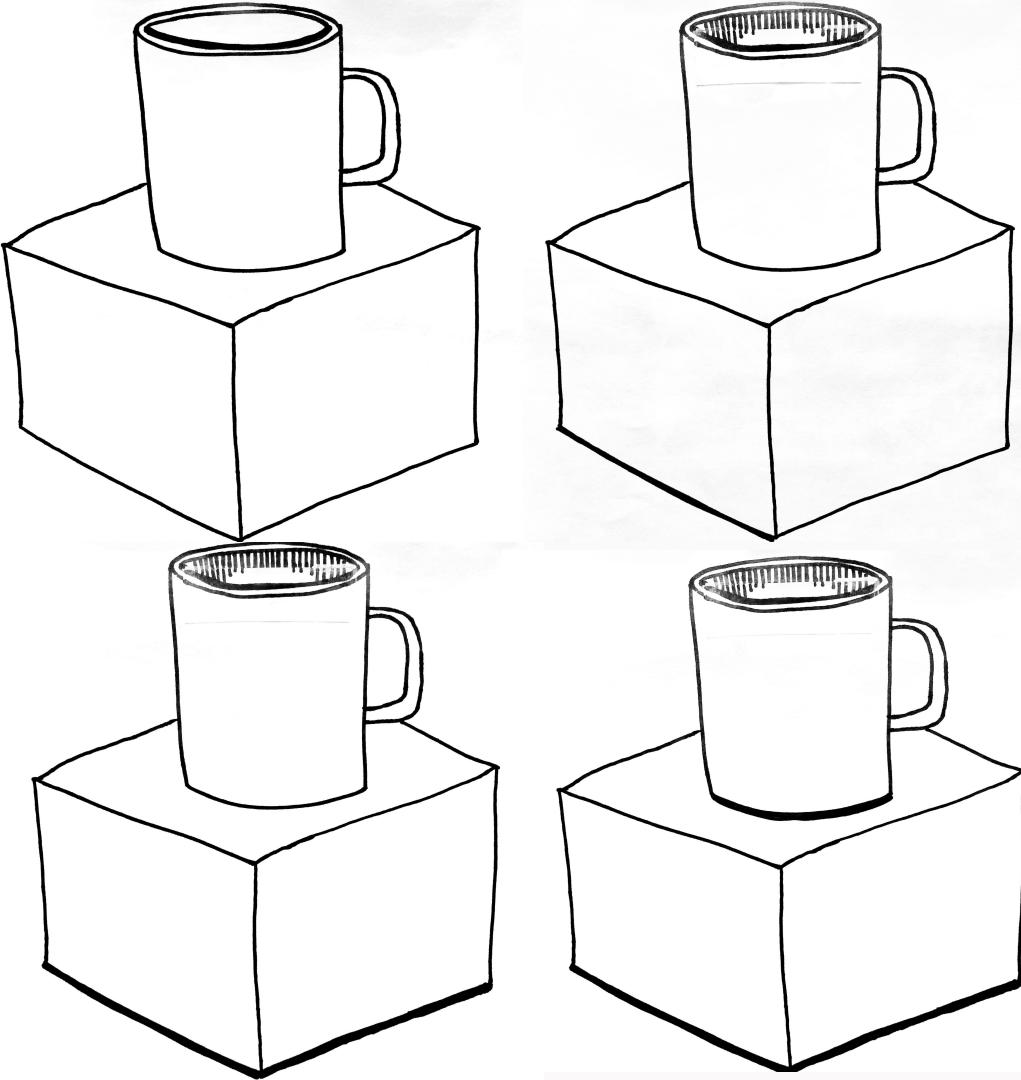
- Multiple line weights
- Isometric
- Repetitive elements
- Tracing
- Color
- Dimensions and scale
- Motion

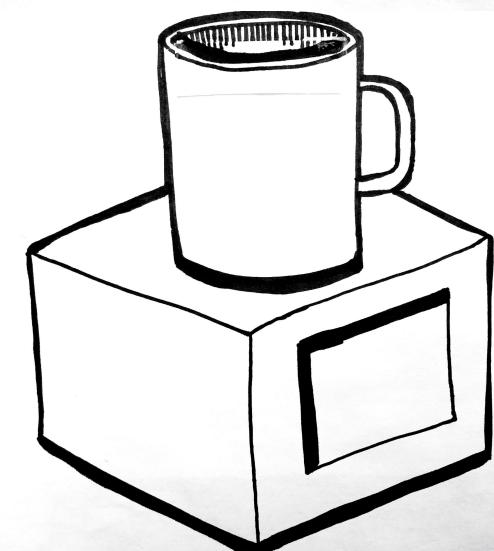
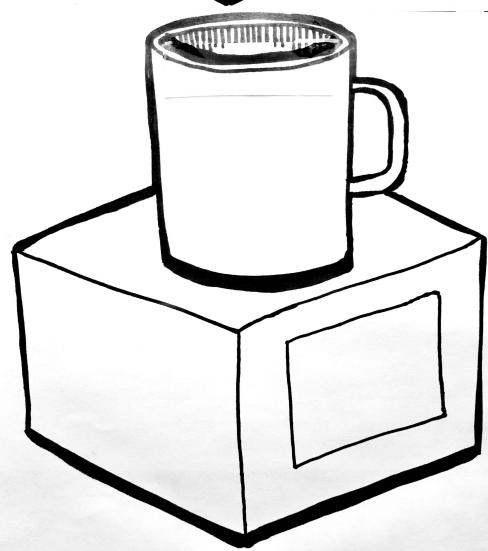
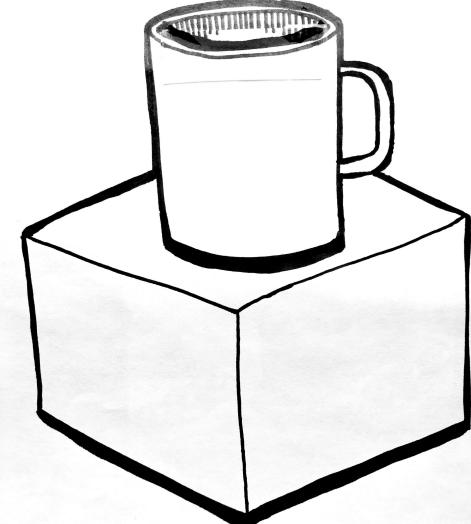
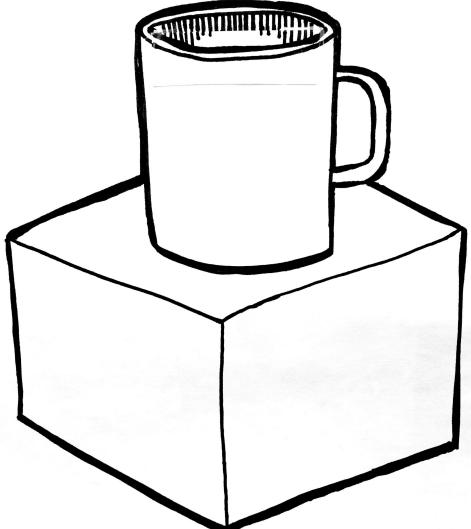


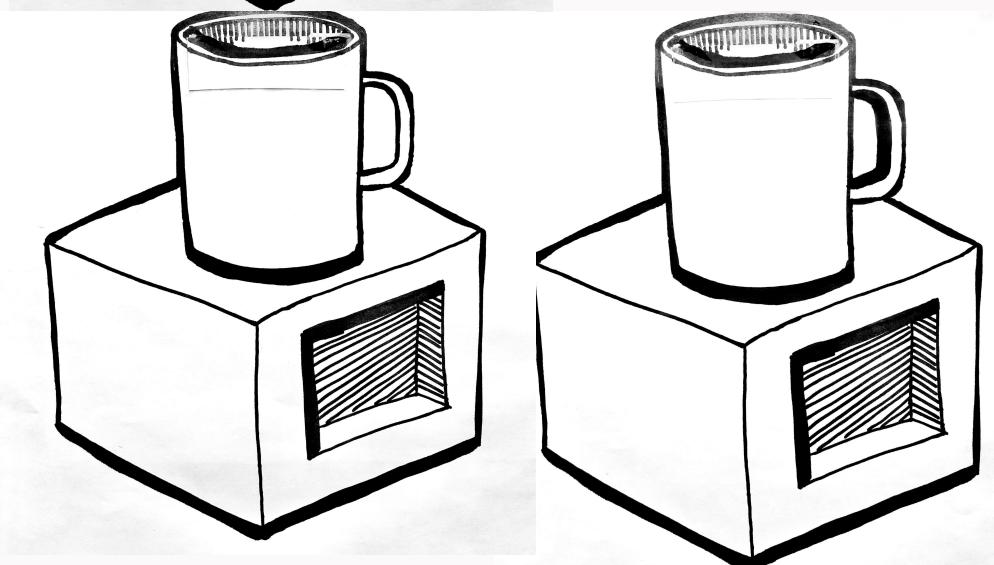
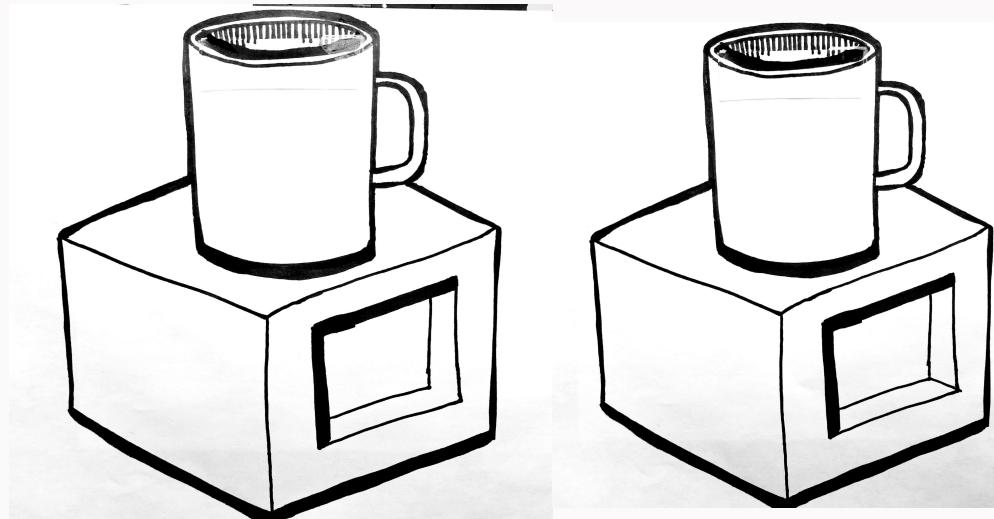
Let's Update Our Mug!

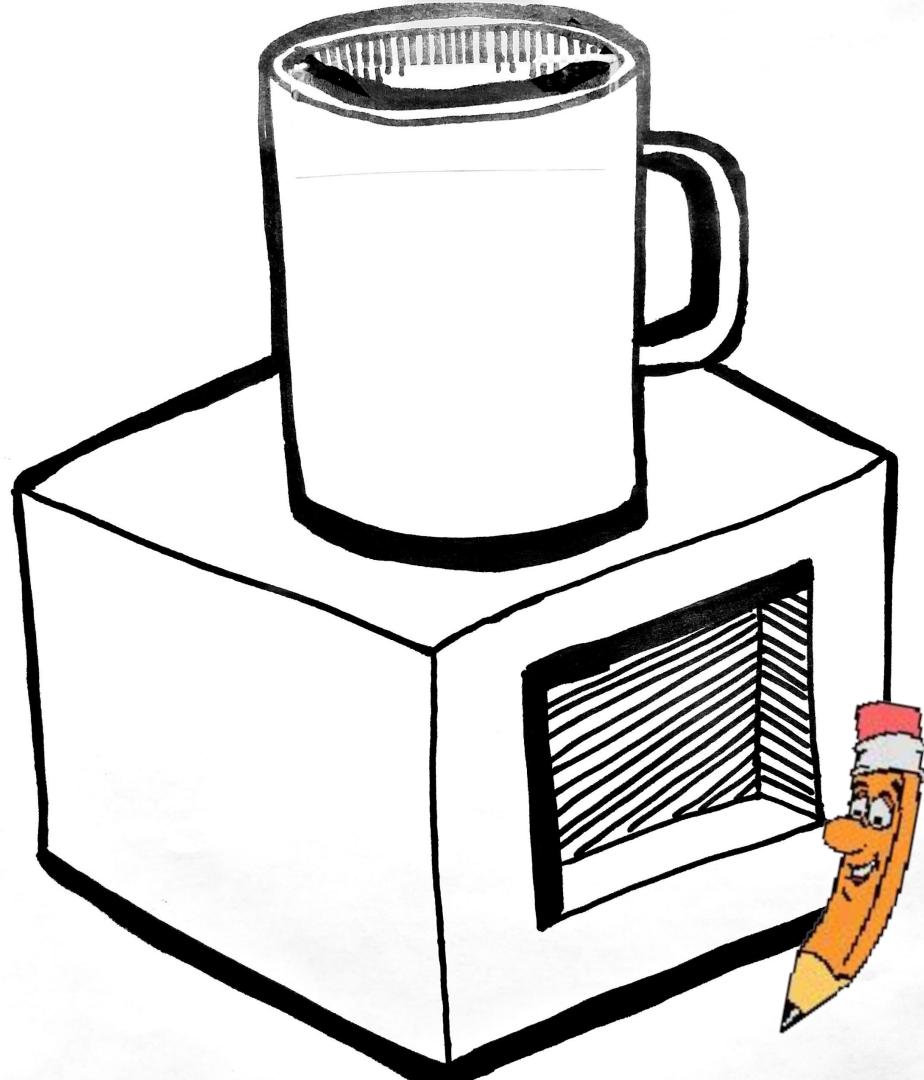
*¡Vamos a actualizar
nuestras tasas!*











Round II: Time to sketch!
jA dibujar!

Some prompts to draw:

Algunas ideas para dibujar:

- What do you use to get ready in the morning?
 - No one uses cars in the future. What do they use instead?
 - What is something that could help you make a sandwich?
-
- ¿Cuál es una cosa que usas para prepararte en la mañana?
 - Nadie usa coches en la futura. ¿Qué se usa en lugar?
 - ¿Qué es algo que podría ayudarte a hacer un sándwich?

Let's talk!
¡Hablemos!

Shareouts:

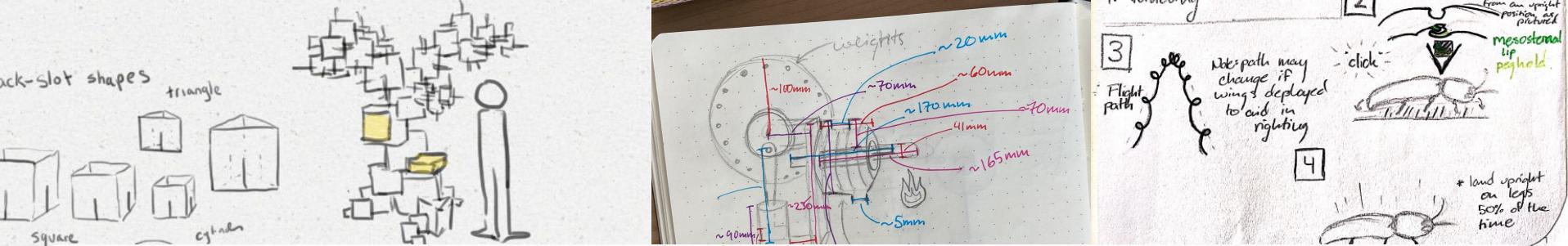
Compartir:

- What is one technique you used the second time you didn't use the first?
- ¿Qué es una técnica que usaste en el segundo paso que no usaste la primera vez?

Final thoughts!

jPensamientos finales!

Thank you and goodbye!
jGracias y adiós!



Design Sketching for Non-Artists

Bosquejos de diseño para los que no se identifican como artistas

Evelyn Kessler (she/her) and Alex Luna (he/him)

