101 of sketching
Children’s Museum Visit

6:30 PM Friday
Brainstorm Assignment

- fantasy
- construction
- sensory
- challenge

Choose 1 favorite idea from each of 4 categories.

Ideate in each category.

Legible full page sketches with idea name and your name.

Redraw these 4 ideas (or more) in design notebook. Pin up original 4 in lab, give to instructor.
Drawing Kit Tutorial
Sketching

Communication, not art!
Sketching
The language of idea generation

Ping-Pong Ball Blaster
A toy blaster that fires plastic ping-pong balls, stores several at once inside its shell, and automatically resets with each pull of the trigger. New balls are loaded via the port on the top, several can be loaded at a time. Pulling the trigger once fires a ball out of the front and after…
Why sketch clearly?

- clarity
- creativity

kudrowitz, wallace 2010
What's the process?

Mental Models

Basic Skills (simple shapes)

3D Rules

Practice
Quiz!

1. What is the theme?

2. Sketch a picture of the side view of a car. Any car.

   *use protective paper

3. Put your name on the back of the sketch
Mental Models and Sketches

step-by-step thought process

Architecture  |  Proportion  |  Detail
What's the process?

Mental Models

Basic Skills (simple shapes)

3D Rules

Practice
The Basic Skills
lines, circles, ellipse
Uncertainty is Visible
What's the process?

Mental Models

Basic Skills (simple shapes)

3D Rules

Practice
Rules: 3D with perspective!

1 Point

2 Point

3 Point
Rules: 3D with perspective!

1 Point  2 Point  3 Point
Rules: 3D with perspective!

1 Point

2 Point

3 Point
Rules: 3D with perspective!

1 Point

2 Point

3 Point

This Class
The Horizon or Eye Line

refrigerator
The Horizon or Eye Line
The Horizon or Eye Line

Horizon
The Horizon or Eye Line

Vertical Lines are always vertical
Proportions
The Cube
The Cube
The Cube
The Cube
The Cube
The Cube
The Cube
The Cube
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The Cube
The Cube
The Cube
The Cube
The Cube

Close Vanishing Points = High Distortion
Close Up Objects
Where are the Vanishing Points?
Close Up Objects
Where are the Vanishing Points?
Close Up Objects
Where are the Vanishing Points?
Close Up Objects
Where are the Vanishing Points?

Almost Parallel
The Cylinder
The Cylinder
The Cylinder

Horizon
The Cylinder
The Cylinder
The Cylinder
The Cylinder

Horizon
The Cylinder
The Cylinder
The Cylinder
The Cylinder

ellipse minor axis
inline with cylinder
center axis

Horizon
The Cylinder

ellipse minor axis inline with cylinder center axis

Horizon
The Cylinder

ellipse minor axis inline with cylinder center axis

Horizon
Cylinder on Cube
Cylinder on Cube
Cylinder on Cube
Cylinder on Cube
Cylinder on Cube
Cylinder on Cube
Cylinder on Cube
Cube on a Cube
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Products of Basic Shapes

- Round table
- Pencil
- Laptop
- Microwave oven
- Spray paint can
- Mailbox
Start with physical models
Putting it Together
Logistics

Practice your basics

Try using perspective sketching for idea generation

Labs start tonight!

Bring drawings supplies to class again on Monday

Don’t forget about the children’s museum visit on Friday (6:30 PM)
Sketching!