Paraline drawings
Objectives

- Paraline drawing
  - Isometric and Axonometric
  - Exploded Isometric drawing
- Paraline drawing - Line weights
  - Exercise
- Kitchenette
  - Exercise
  - Homework #2
Isometric

- Paraline drawings
  - another method used for 3D presentation drawings
  - The view is not as realistic as a perspective
  - quick and easy to convey idea
    - To show the design of an interior room

- Isometric
  - both length and width are at the same angle, which are typically 30/30, 45/45, and 60/60 degrees
  - all the vertical and horizontal lines represent the true dimension
- All lines are kept parallel to each other
- Using a scale to draw the image keeps it in proportion

- Isometric 30/30 and 45/45
  - Sketch both images (10 Minutes)
Axonometric

- Sketch this image (5 Minutes)

- Both length and width are not at the same angle, which is typically at 30/60 degrees or vice versa 60/30

- All the vertical and horizontal lines represent the true dimension
Exercise 1

- Draw a cube in
  - Axonometric 60/30
  - Isometric - symmetrical
    - Isometric in 45/45
    - Isometric in 30/30
- Show line weights
Exercise 2

- Draw a rectangular box in
  - Axonometric 60/30
  - Isometric - symmetrical
    - Isometric in 45/45
    - Isometric in 30/30
- Show line weights
Homework 1 - Exploded Paraline drawing

- Isometric with 30/30
- Can use drafting tools
- Visually communicate different planes and the spatial relationship between spaces
  - Construction lines are used to connect exploded objects back to the primary form
- Estimate the size of this form
- Show profile lines
Study of the Interior space relationships

Exploded Paraline drawing
Exercise 3 - Paraline drawing - line weights

- Sketch this drawing and show line weights
  - Heavy Line - Profile line
  - Intermediate line
  - Light line
Paraline drawing - Line weight

- Sketch this drawing and show line weights
  - Lightest line
    - Tonal, value, hidden lines
Exercise 4 - Method to construct Paraline drawings

- **Additive method**
  - Can be constructed in both Axonometric and Isometric
  - Construct this drawing in Axonometric 30/60
  - Draw the overall volume of this object
  - Then combine a series of volume to create the overall form by adding 2 cuboids
  - Show line weight variation

- **Manipulate the volume**
Exercise 5

- **Subtractive method**
  - Can be constructed in both Axonometric and Isometric
  - Construct this drawing in Axonometric 30/60
  - Draw the overall volume of an object
  - Then remove/subtract the portion of the solid volume
  - Show line weight variation

- **Manipulate the volume**
Exercise 6 – Isometric

- Scale: \( \frac{1}{2}'' = 1' - 0'' \)
  - 18” each cabinet
  - 36”h x 24”d base cabinets
  - 30”h x 12”d wall cabinets
  - 1” thick countertop overhang
  - 1”
  - 4” toe kick
  - 4” back apron
  - 6” Filler
  - Show line weight variation

Dimensions:
- 78”
- 6”
- 18”
- 24”
- 30”
- 30”
Homework 2 – adding details to Isometric

- Scale: \( \frac{1}{2}'' = 1' - 0'' \)
  - 18” each cabinet
  - 36”h x 24” base cabinets
  - 30”h x 12” wall cabinets
  - 1” thick countertop
  - 4” toe kick
  - 4” countertop back apron
  - Single bowl sink 33” x 22 “x 10”d
  - Show line weight variation
Example of isometric drawings
What have you learned?

- What is the difference between isometric and axonometric?
- What are the angles that you use to draw isometric and axonometric?