**Pictorial Drawing**
- 2D illustration of a ____________
- Shows three faces of an object in one view
- Provides a realistic view of an object
- Three types
  - Isometric
  - Oblique (Cavalier)
  - Oblique (Cabinet)
  - Perspective

**Isometric Pictorial**
*Isometric* means ________________.
- Three adjacent faces on a cube will share ________________.
- Edges converge at one point will appear as 120 degree angles or 30 degrees from the horizon line

**Isometric Pictorial**
- These three edges represent height, width, and depth

**View labels**
- Top, Front, Right Side view orientation
- Top, Left Side, Front, view orientation
View Selection

- Recommendations for how to select the front view
  - Most natural position or use
  - Shows __________________________ and characteristic contours
  - __________________________
  - Fewest hidden lines
  - Most stable and natural position

Orthographic View Selection

- Best shape Description
  - Longest Dimension
  - Best Front View
  - Most natural position

The Box Method

- The box method is a sketching technique used to maintain ________________________________
- It starts with a sketcher envisioning an object contained within an imaginary box

- Good sketching requires a sense of proportion, and the ability to estimate size, distance, angles, and other spatial relationships
EXAMPLE Isometric Sketch

Step 1: Constructing The Box
Determine the overall dimensions of the object:
- 3 units wide
- 2 units tall
- 2 units deep
Use points and construction lines to layout the box.

Step 2: Outside Faces
Use points and construction lines to identify corners and edges of object faces that occur on

Step 2 ñ Outside Faces (continued)
Before sketch becomes too congested with construction lines, trace visible edges with

Project Lead The Way, Inc.
Copyright 2012
Step 3 - Inside Faces
Use points and construction lines to identify the corners and edges of the object faces that occur inside the box.

Step 3 - Inside Faces (continued)
Trace out remaining visible edges with object lines.

Step 4 - Tonal Shading
- Decide the light source position, and add tonal shading to two of the three faces
- A shading option is to use parallel lines drawn closely together on a face
- Increase contrast by cross-hatching lines on darkest face

Isometric Sketch Example