

SPACE

Showing Distance & Depth



Graffiti-covered billboard, David Alan Taylor, Photograph, 1994

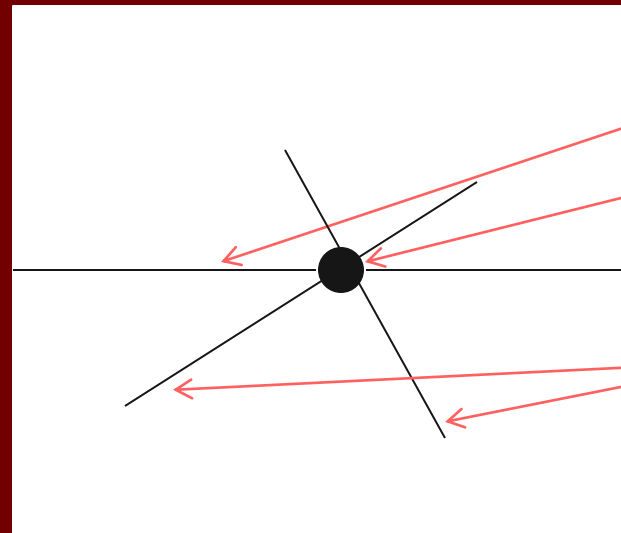
LINEAR PERSPECTIVE

- A trick invented in Europe in the 1500s in a time called the Renaissance. It makes flat (2D) surfaces look 3D. A systematic mathematical way to draw and paint the way we see. A picture is given apparent depth by showing parallel lines cross on the horizon.
- **Important:** the guide lines are not parallel, they represent parallel lines but meet at the vanishing point and triangulate out from there



The International Exhibition of 1862 The nave, from eastern dome, William England, 1862, Stereograph Photograph.

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1. Horizon Line

2. Vanishing Point

3. Guide Lines

NO LINEAR PERSPECTIVE

Without innovations in perspective in the 1500s, paintings looked flat with cartoonish bold outlines, hierarchical perspective (important = big) and confusing height relationships.



Henri Romain. *Gestes et faits des anciens* (Acts and Deeds of the Ancients). C 1400, Vellum

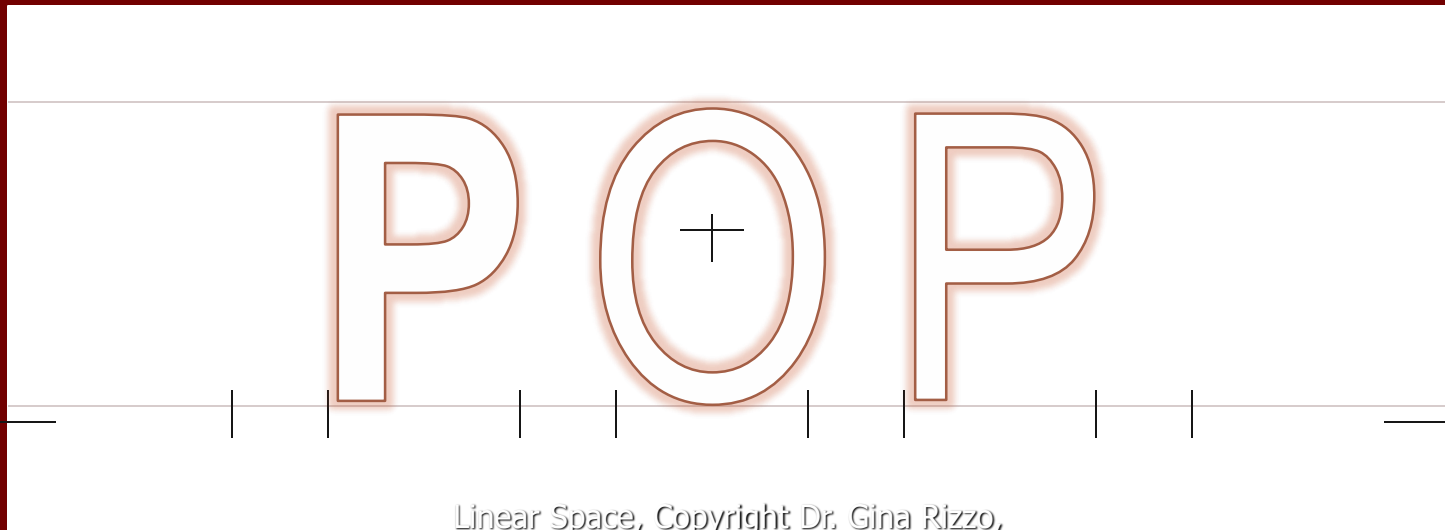


Christine de Pisan *Le Livre de la Cité des Dames* (The Book of the City of Women), c.1405, Parchment

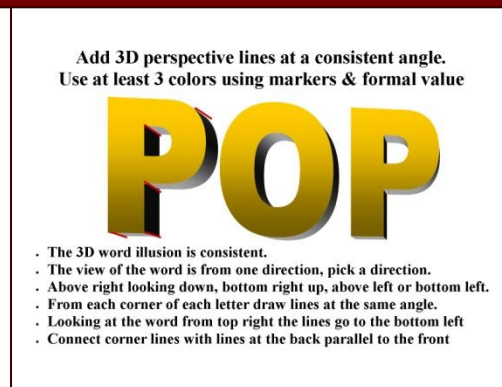
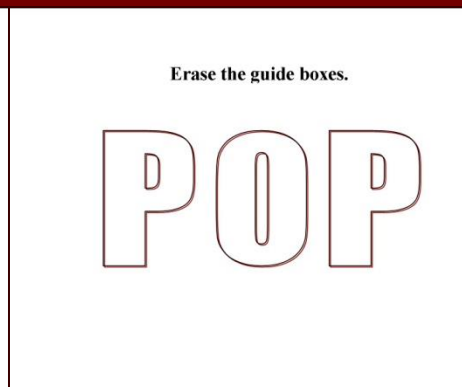
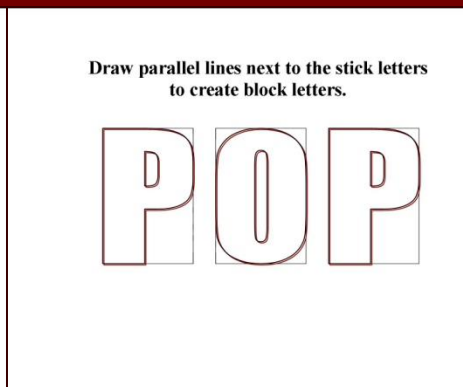
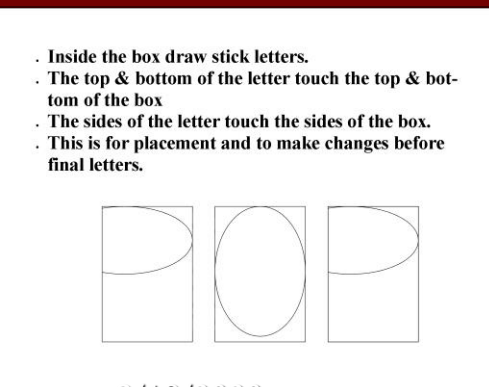
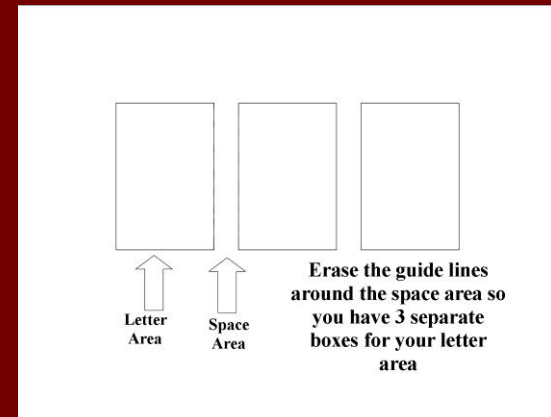
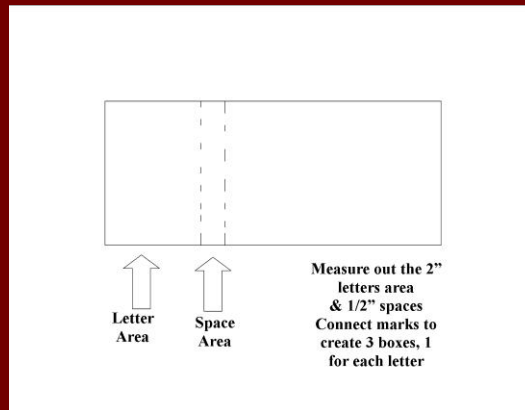
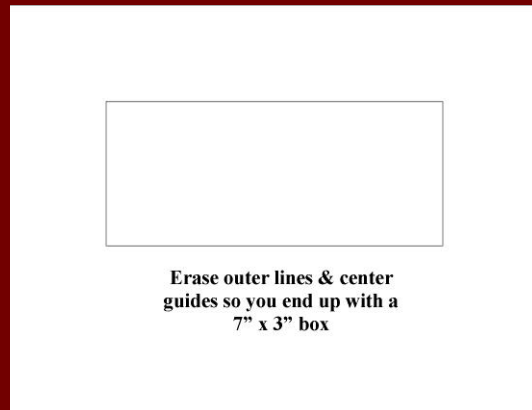
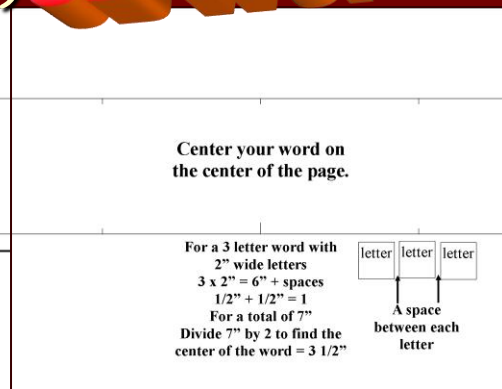
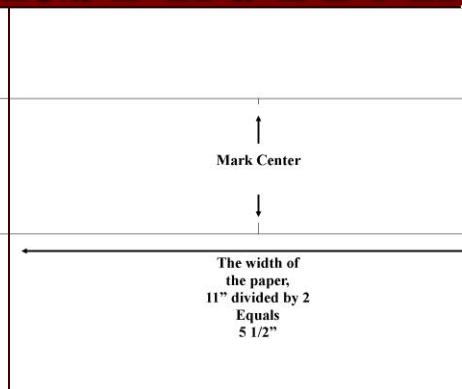
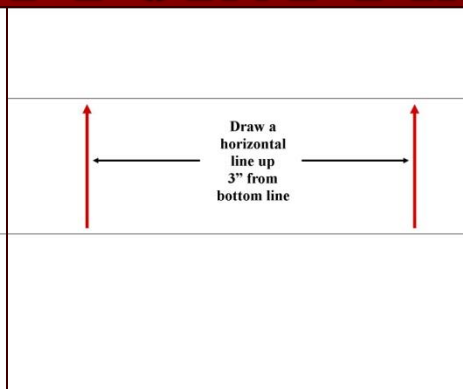
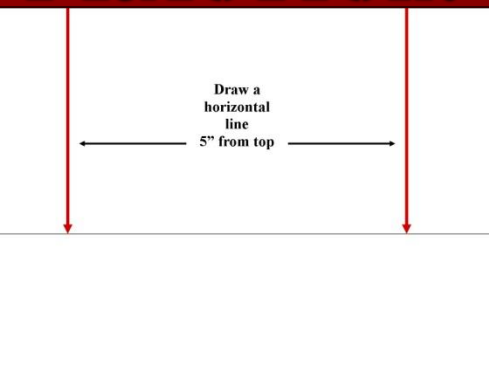
PRACTICE: 1 POINT PERSPECTIVE, 3D Word

Part 1 - Assignment: Write at least a 3 letter word 3D evenly spaced & aligned

1. Use an 8 ½" x 11" paper oriented horizontally
2. Make sure the ruler edge is even with the paper edge & measurement marks.
3. Create top & bottom guide lines for the word. All letters touch these. Measure the page from the top down 5" on the right & left. Measure up 3" from the bottom line.
4. Center the word, measure the width of the paper, divide by 2, mark that point.
5. Decide how many & how wide the letters will be with spaces. In a 3 letter word at 2" per letter, with 2, ½" spaces the word will be 7". Center the word as above. Draw a line at the zero edge of the ruler & the 7". That is the guide box for the outer edges of the word. Create guide boxes for each letter. All letters touch these line.
6. For correct placement, draw stick letters inside guide boxes, touching all sides of the box. Draw block letters over the stick letters parallel to the stick letters .



PRACTICE: 1 POINT PERSPECTIVE, 3D Word



PRACTICE: 1 POINT PERSPECTIVE, 3D Word

Part 2

1. The 3D illusion is consistent. The view of the word is from one direction. Pick which direction to draw the word from: above right looking down, bottom right looking up, top left looking down or bottom left looking up.
2. From the corners of each letter draw lines at the same angle. If you are looking at the word from the top right the lines go to the bottom left.
3. Connect the corner lines at the back parallel to the front

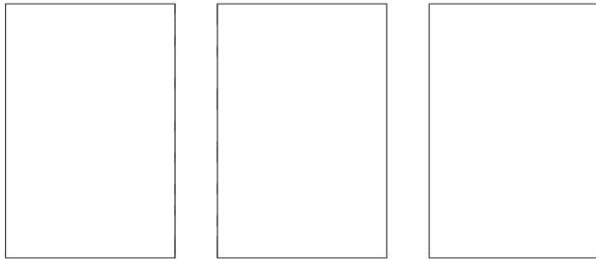


Details of various graffiti murals, Martha Cooper, Photograph, 1994

PRACTICE: 1 POINT PERSPECTIVE, **3D Word** MODIFIED

Modified 3D Word Template

- . Using blank paper over this paper
- . Draw block letters in these boxes
- . The top & bottom of the letter touch the top & bottom of the box
- . The 2 sides of the letter touch the 2 sides of the guide box.



Modified 3D Word Template

Place a blank piece of paper over this paper and trace each letter and all of its sides.



GUIDED PRACTICE 1:

1 Point Linear Perspective Room

1

Turn horizontal

2

Draw a horizon
line

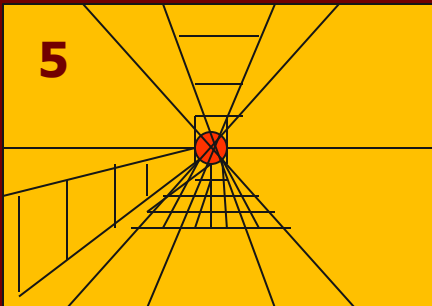
3

Add a vanishing
point

4

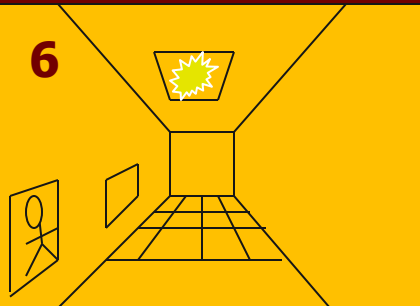
Draw
guides

5



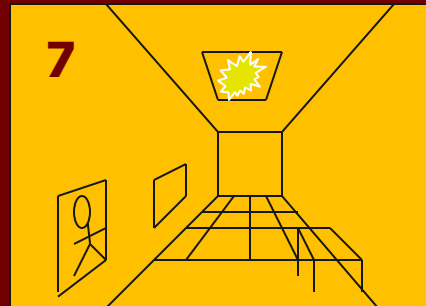
Add vertical &
horizontal lines

6



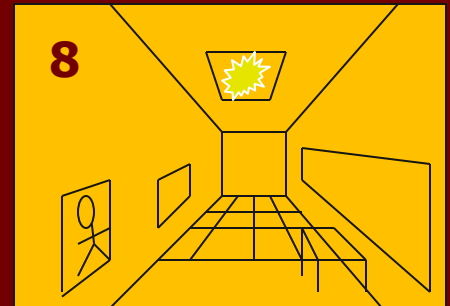
Erase guide lines

7



Include a table or
bench

8



Add a window

GUIDED PRACTICE 2:

1 Point Linear Perspective: Cube & City Views

1

Turn horizontal

2

Draw a horizon
line

3

Add a vanishing
point

4

Insert a square

5

Draw
guides to
the
vanishing
point

6

Add
vertical &
horizontal
lines

7

Erase the
end of
the guide
lines

8

Add a box

9

Make it yours:
Add people, cars...

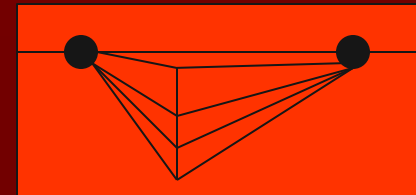
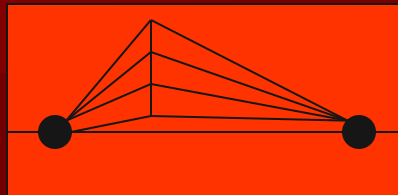
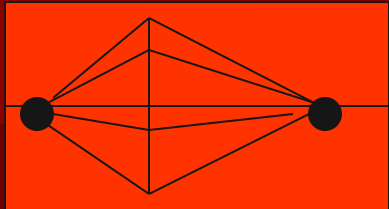
There are many
Options: The
cubes could be
cars, trains, or...

Option: Look down

Option: Lower the
horizon line

GUIDED PRACTICE 3: 2 Point Linear Perspective

Front View: guide lines are evenly above & below the horizon line Worms Eye View, looking up: guide lines are above the horizon line Birds Eye View, looking down: guide lines are below the horizon line



1 Turn the page horizontally.

Draw a horizon line.

2

Add 2 vanishing points

3

Draw a vertical center line

4 Add guides from

the center line to the vanishing points

5



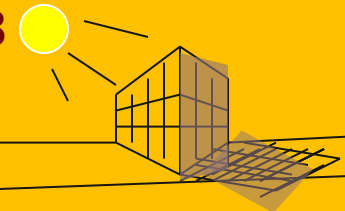
6



7



8



Add 2 more vertical lines on each side of the center line, inside the vanishing pts.

Erase the horizon line & vanishing points.

Make it into something: a building, a pedestal...

Add a light source and a shadow on the opposite side, use value

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GUIDED PRACTICE 4:

Combined 1 Point Linear Perspective Gallery with A 2 Point Linear Perspective Pedestal

1

Draw a 1 point perspective room

2

Draw a horizon line

3

Add a vanishing point

4

Draw guides

5

6

7

8

9

10

11

Add personal details from your imagination

Add a 2 point pedestal use guides

Erase guides add a sphere on the top

Add shading & a cast shadow

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INDEPENDENT PRACTICE 1: LINEAR PERSPECTIVE OPTIONS

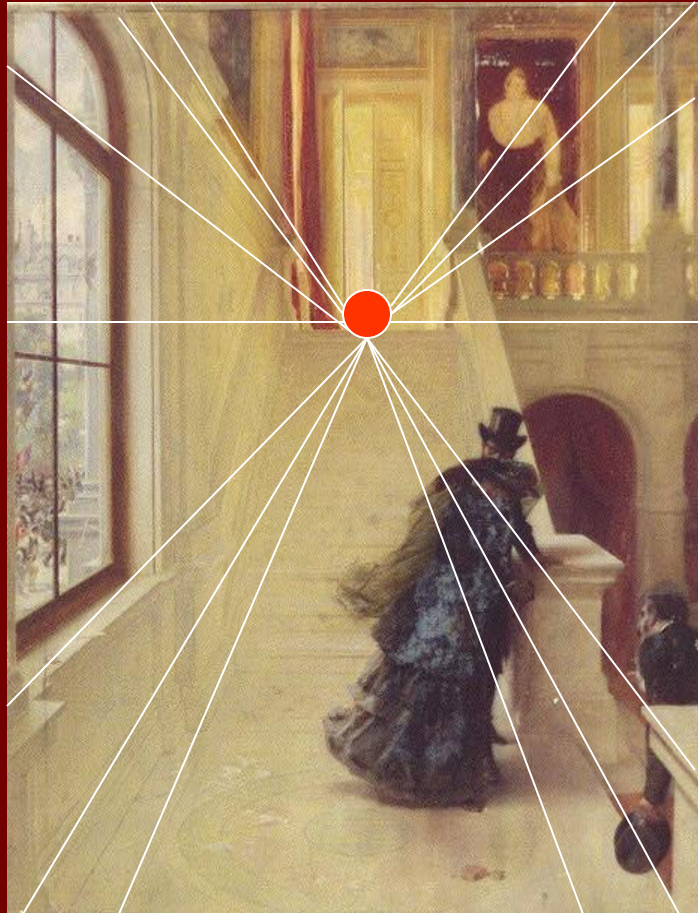
- A. Find a photograph in a magazine, draw over it using linear perspective elements and label the linear perspective parts**
- B. Copy an illustration, painting, and photograph using 1 point perspective**
- C. Copy an illustration, painting, and photograph using 2 point perspective**
- D. Draw a combination of 1 and 2 point perspectives from your imagination**



Les Campagnes de Louis XIV. Campagne du Roy pendant l'année M.DC.LXXVI (The Campaigns of Louis XIV. The King's Campaign during the Year 1676), after 1678, Parchment.

INDEPENDENT PRACTICE 2: LINEAR PERSPECTIVE ROOM

- Using a ruler begin with guide lines
- Start with the front wall and work your way out to the sides.
- Get the correct angels of walls and objects in perspective.
- Include value and texture
- Do not draw details of people, only their outlines.

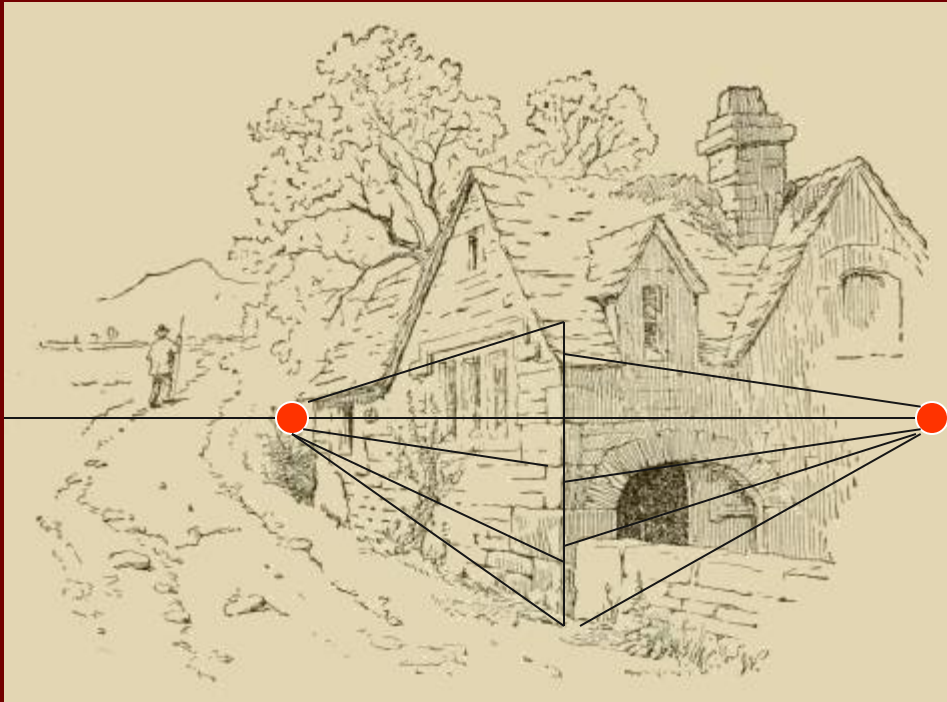


Flight of the Empress Eugénie from the
Tuileries, J. André Castaigne, 1914

INDEPENDENT PRACTICE 3:

LINEAR PERSPECTIVE BUILDING-SCAPE

- **Find a view outside (Plein Air) that includes buildings and uses 1 &/or 2 point linear perspective**
- **Use a ruler, begin with a horizon line, vanishing point or points & guide lines**
- **Get the correct angles of walls and objects in perspective.**
- **Include value (shading) and texture**
- **Do not draw details of people, only their outlines**
- **Use a shading shorthand for shrub and tree foliage: just cross hatch or hatch, do the same for grass and include blending/smudging for the sky**



ANALYSIS & REVIEW: PERSPECTIVE

- 1) What are three basic levels of depth in a picture?
_____ground, _____ground, and back_____.
- 2) Draw and label an example of one point perspective
- 3) What is the first thing to draw in a linear perspective drawing?
- 4) What is a vanishing point?
- 5) How many vanishing points are in a two point perspective drawing?
- 6) Show an example in two point perspective of...
 - a) An overhead view, looking down: birds eye view
 - b) A view from below, looking up: worms eye view
 - c) A view from the front

***Bonus: When and/or where was linear perspective invented?**

References

- Library of Congress: <http://www.loc.gov/>
- Reusable Art: <http://www.reusableart.com/>