

Week 5: Perspective

THIS TUTORIAL DIFFERS FROM ALL THE OTHERS

Perspective (n)

Perspective can mean many things.

First found ca. 1590's in Middle English "Perspectyf", derived from the Old French term "Perspective" and Medieval Latin¹ "Perspectivum" which derives from the form "Perspectivus" which means "of sight, optical" and the past participle form "Prospectus" meaning "clearly perceived" and the past participle "Perspicere" or "to inspect, to look through"

The alternate definition of perspective, meaning one's personal view of a topic, was recorded later, ca 1762.²

However, in the art world, "perspective" generally means the technique(s) of drawing objects so as to give the appearance of distance or depth.

It is also, frequently a college-level drawing course.

The beginnings of Perspective Drawing are found in Three-Dimensional Form Drawing, and it is this drawing that seems to be described in the Foundations Guide. You have to be able to understand how to draw the cubes, columns, ect. described in the Foundations Guide in order to be able to draw objects in perspective, but some (I know my drawing instructor would be among them) would not consider that "perspective".

From the Classical ideas of the Trivium, Three Dimensional Form Drawing could be part of the grammar of the techniques of Perspective. And there are LOTS of Perspective techniques-zero/informal, one, two, three, four, five, and six point perspective, plus others like curvilinear and oblique. I'm not going to take you deep into perspective, and for my own sanity, I try to stay away from anything more difficult than two-point. (Six Point perspective is akin to drawing something reflected on the back side of a crystal ball...makes your eyes cross trying to do it.)

So, if your class is younger and/or new to CC's drawing section, start with the Three Dimensional Form Drawing section, and complete as many, or as few of the mini lessons as you can. Any "leftovers" can be saved for the week at home with parents if they want.

Three Dimensional Form Drawing will cover using OILS to make cubes, cones, columns, pyramids and spheres, which many artists combine to make everything from still life compositions to the human figure.

¹I love how Latin just keeps popping up, now that I'm looking for it.

² Source: Webster-Merriam Online Dictionary and online Etymology Dictionary

Script for Week Five Drawing Section: “Perspective”
2016-2017 / Cycle 2

If your class is older and/or has been through CC’s drawing section multiple times and/or can demonstrate that they already know how to draw cubes, cones, columns, ect. And can combine them to “build” on paper, you may want to try the classic step-by-step house in one-point perspective. I also completed other step-by-step concepts, including a lighthouse and Bodiam Castle in England, which I’ll post over the next few days for those who get into it and want to try more.

The classic One-Point Perspective with a house and a road exercise might take the whole half-hour. The others might be combinable.

But if you have questions, or I screwed up and didn’t explain something clearly, please, please please, contact me at rebekah@drawingdemystified.com, or ask questions on my Facebook page, Drawing Demystified (<https://www.facebook.com/drawingdemystified/>) or the tutors and Subs page. I want to help, because I love this world, and I cannot improve these scripts without your feedback!

Subset 1: Three dimensional Form Drawing

Mini-Lesson 1: Using OILS to draw Cubes, Cones, Columns and more

Mini-Lesson 2: Building Blocks on paper: how to combine Cubes, Cones, ect to build anything on paper.

Subset 2: Perspective Drawing

One-Point Perspective.

Subset 1: Three Dimensional Form Drawing

Mini Lesson 1: Drawing Cubes, Cones, Columns and More

Materials Needed:

- Paper
- Pencils
- Erasers
- Rulers

"...any object, no matter how complicated...is made up of a sphere, a cube, a cone, a cylinder, or some combination of these forms." -The Famous Artists Course, Chapter 2: Form-the Basis of Drawing³

Tutor: Thus far, we've learned how to use OiLS to draw objects we are looking at--like Eleanor of Aquitaine, or a castle, or an animal. What are OiLS again?

Today, we're going to look at how to draw things from imagination that look three-dimensional, but they're still on a flat sheet of paper.

So, quick review: what are OiLS again?

<Class should be able to rattle this off by now, feel free to re-show or post the OiLS diagram where they can see it.>

Tutor: Very good! So now let's look at a cube

<Draw a cube on the board or a piece of paper. If you need help drawing a cube, a step-by-step tutorial is included.>

Tutor: Can we break this cube down into OiLS?

<See what they say-they should be able to find angled lines and straight lines.>

Tutor: Great! How about a cone?

<Draw a cone on the board or paper-again, if you need them, step-by-step guide is provided..>

³ In case you were curious, this was a course my grandmother in law took when she took up painting seriously—in her fifties, after her children were grown and gone. She's now an accomplished oil and acrylic portraitist. If you can find it, it is a great course to read through.

Tutor: Can we break this down into OiLS?

<class should be able to find ovals and angled/straight lines>

Tutor: Fantastic! Now, there are four or five basic shapes in art. With these shapes, you can "build" a scene in your pictures just like you build with blocks. These shapes are;

- Cubes
- Columns
- Spheres
- Cones
- And sometimes, Pyramids⁴

Take a look at these shapes, and lets see if we can break them down into their OiLS

<spend a few minutes doing this, and show the OiLS of Form poster.>

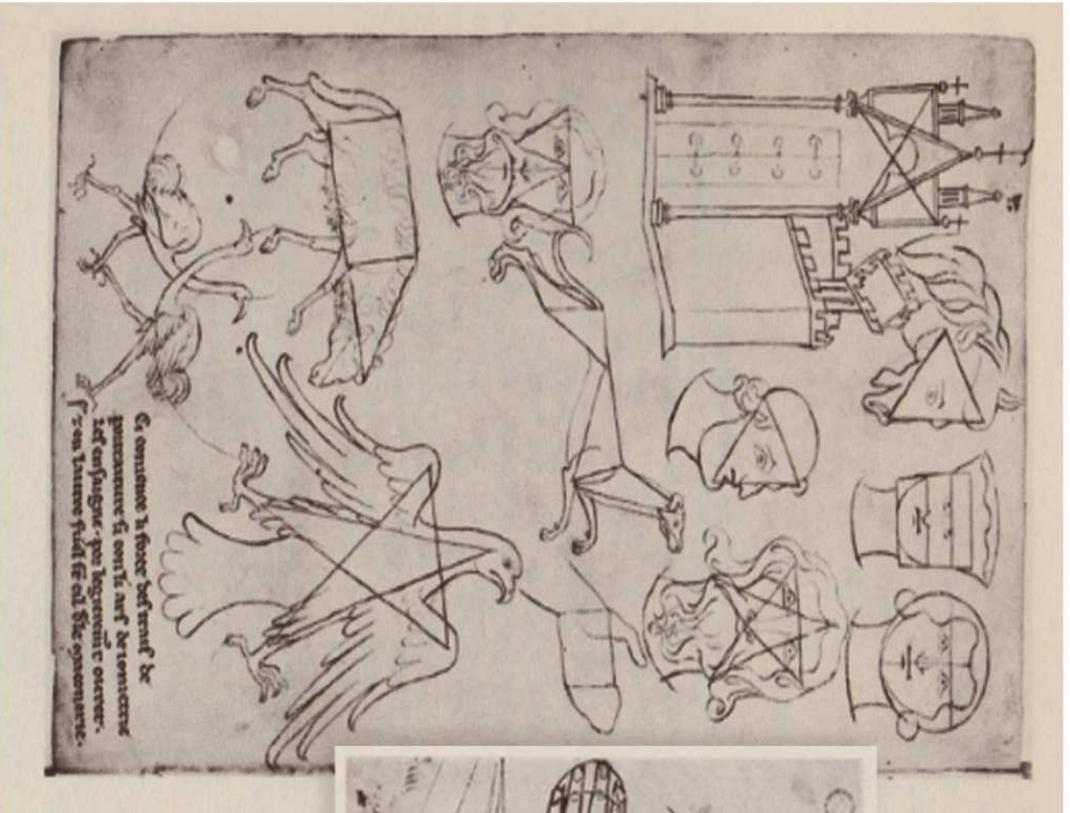
Tutor: So let's practice drawing these "building blocks".

Activity:

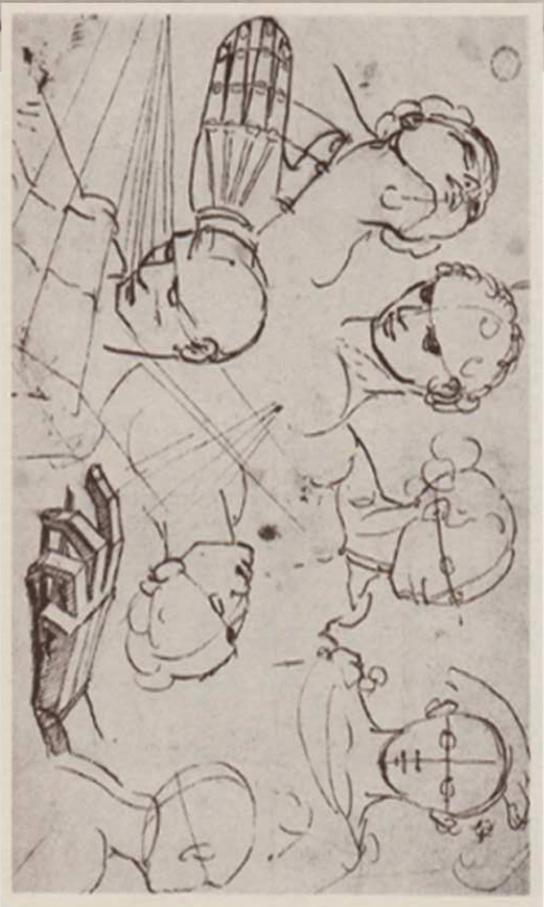
Using the included step-by-step instructions for drawing each of these items, (or your own technique, if you use a different one!) practice drawing cubes, cones, ect., walk your class through drawing these items. Using the "variations" you may like to tackle drawing a long or thin box, or a cone seen from below rather than the side.

⁴ Some artists claim pyramids are just cubes balanced on the point and sliced through, which makes them a sub-set of cubes, or they are just cones on a square base, making them a sub-set of cones. Other artists claim all cones are just part of the column family, leaving only three basic shapes: Spheres, Columns, and Cones.

To-may-to, to-mah-to, at this level, that's up to you. No one will be hurt by adding or ignoring it.



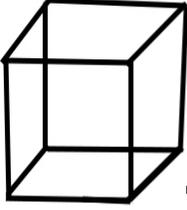
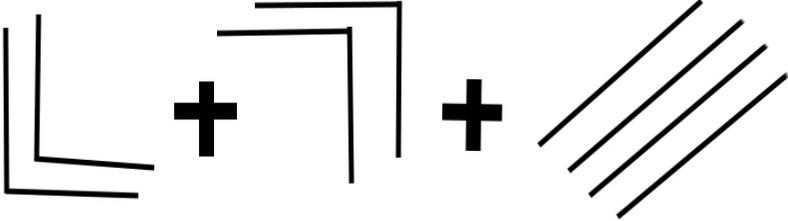
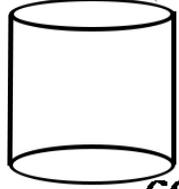
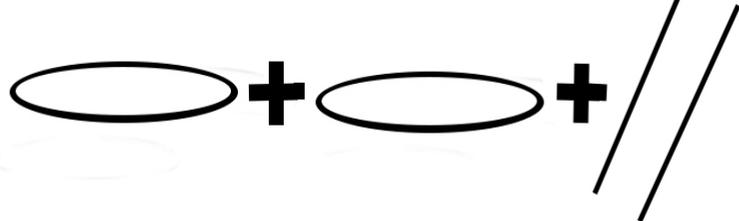
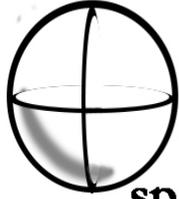
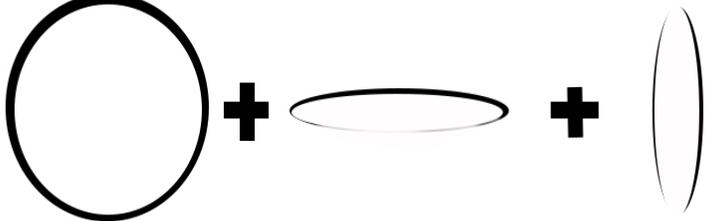
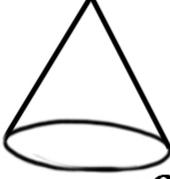
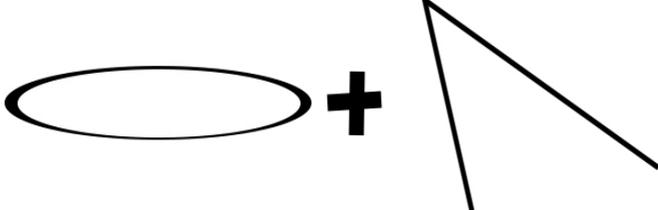
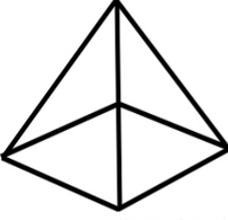
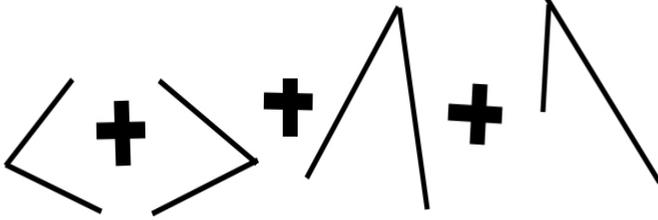
Above: Sketches by Villard de Honnecourt (active c. 1230 - 1240) The inscription in the lower right allegedly says, "[Drawing,] as it is taught by the discipline of geometry...is easy to practice."



Below: Sketchbook from Hans Holbein the Younger (c. 1497 - 1543), court painter to King Henry VIII of England

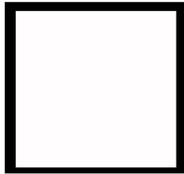
“...any object, no matter how complicated...is made up of a sphere, a cube, a cone, a cylinder, or some combinations of these forms.” -The Famous Artists Course, Chapter 2
“Form-the Basis of Drawing”

The OiLS of Three Dimensional Form

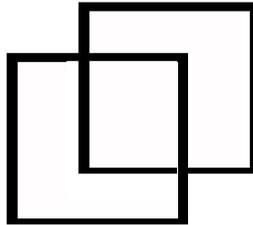
 <p>cube</p>	
 <p>column</p>	
 <p>sphere</p>	
 <p>cone</p>	
 <p>pyramid</p>	

Drawing a Cube

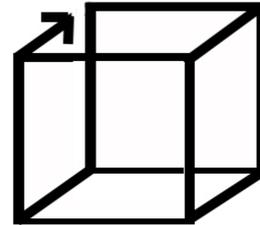
Base Model



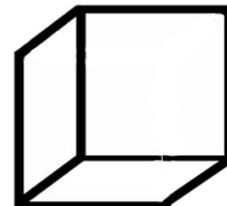
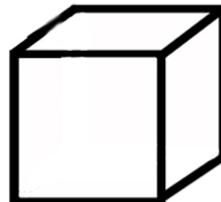
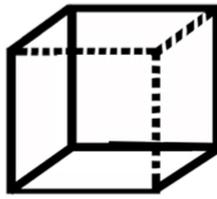
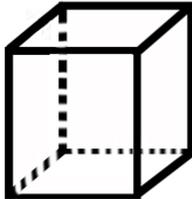
1. Draw a square
(or rectangle)



2. Draw a similar square
just behind the first square

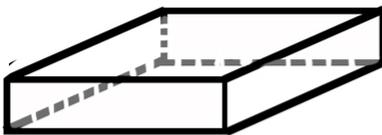


3. Connect four corners
of both squares with
straight lines

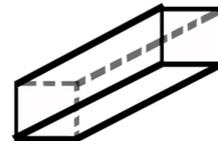


4. (Optional) Half-erase or erase the "back" lines to reveal your completed box.
Practice erasing different lines to find out how to make one part of your box the
"front" and another the "back".

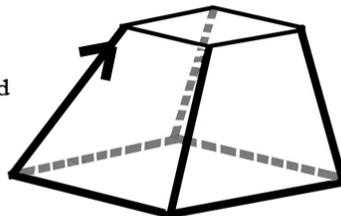
Variations



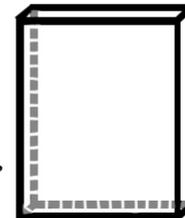
Draw the first two boxes narrow and
so far apart, they don't overlap.



Draw long boxes



Draw a truncated Pyramid: Draw a diamond-shaped box on the "ground"
and another one above it, then connect the corners!



...or flat ones

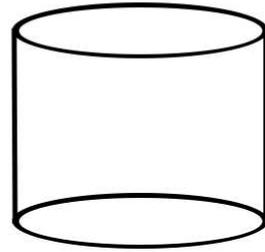
Drawing a Column



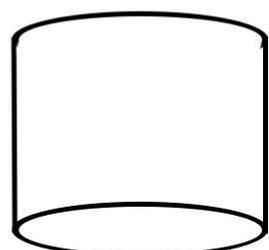
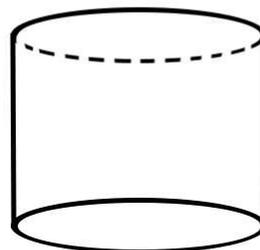
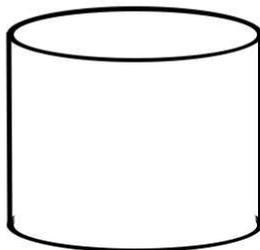
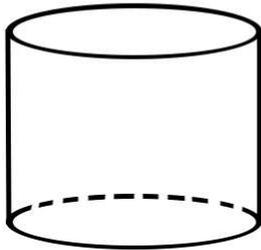
1. Draw an oval



Draw a similar shape and sized oval above or below the first oval

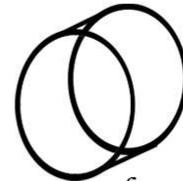
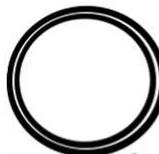
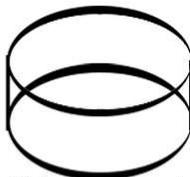
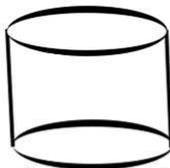
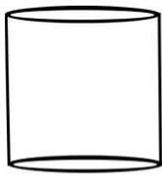


Draw straight lines from one oval to the second oval.



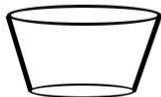
Dot or erase half of one oval to indicate the "back" of the column.
Practice erasing various parts to see how you can "turn" the column one way or another.

Variations



Draw your cone from the side like the box instructions. (Great for making wheels!)

Like a cone, a column's ovals will look rounder the higher you view the column from, and the straight lines will get shorter. At the top, you'll see one circle directly stacked within another.



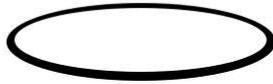
Two different sized ovals will make a tapered cylinder.



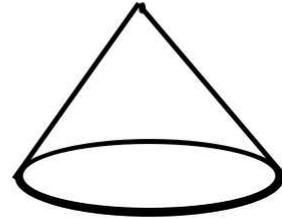
Drawing a Cone



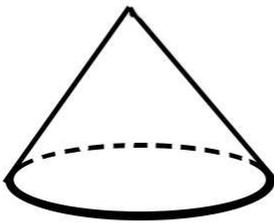
1. Draw an oval



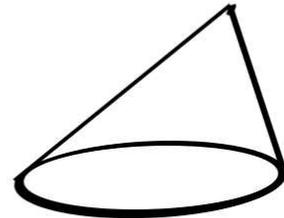
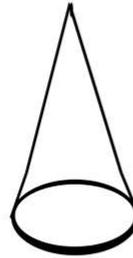
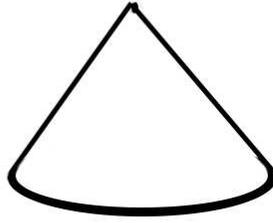
2. Draw a point above,
(or below) the oval.



3. Connect the point
to the edges of the oval
with two straight lines.

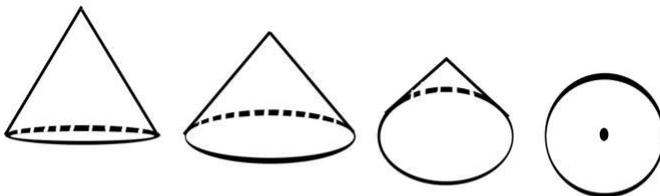


5. (Optional) erase or dot the "behind" line.

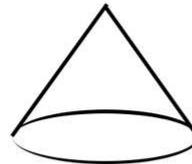


Practice different heights or
moving the "point" to
one side or another!

Variations



The more round you make your first oval, the higher you're viewing it from, and the shorter the "straight lines" will appear in relation. If you're directly over a cone, you'd see a circle with a dot in the center.

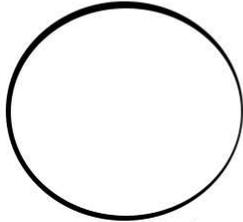


If you leave the oval intact, it can look like you're viewing the cone from the bottom!

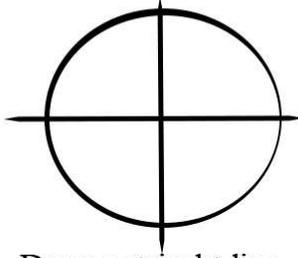


Using a cone as a "skeleton", add details to make something like a mountain, or a pine tree.

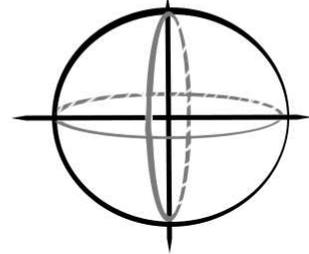
Drawing a Sphere



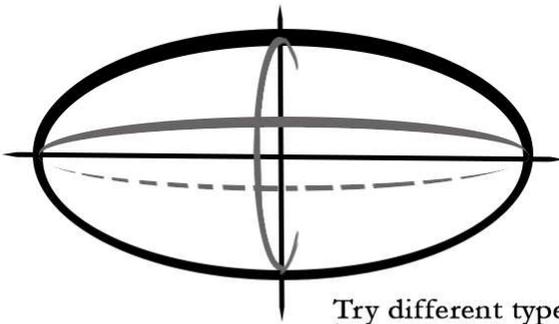
Draw a circle



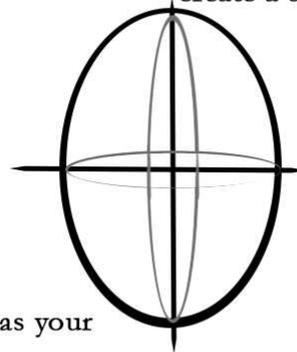
Draw a straight line from top to bottom of the circle (the axis) and side to side through the equator of the circle



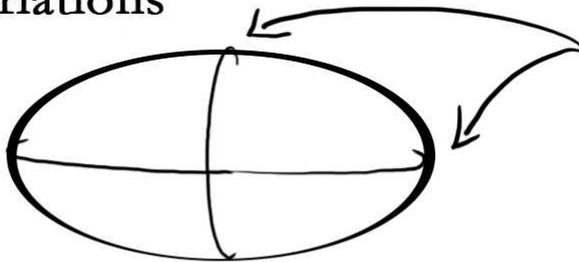
Using these as guides, draw cross-sections of the sphere to show fullness. You can erase the "back" lines to create a solid sphere.



Try different types of ovals as your base!



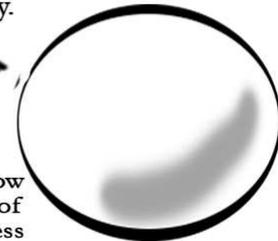
Variations



This gives me just enough direction and sense of fullness to continue. A finished work of art almost never has these registration marks showing, because they've been covered by the finishing work. But these type of division marks are used frequently.

Most artists practice spheres to the point where they don't have to follow all these steps. To be honest, spheres are easiest to show through shadow. Here's another way to draw spheres.

A simple shadow indicates a sense of solid roundness instead of a flat circle.



Mini-Lesson 2:

Making things out of shape to create more complex shapes-even humans!

Materials:

- Paper
- Pencils
- Erasers!!!!
- Ruler
- Printables (included)

How do we build things on paper?

Much like a set of blocks, you can build people, animals, buildings and things using shapes and OILS on you paper.

Take a look at this picture. The artist was demonstrating how he used blocks to "block" out humans in various poses. This sketch was from Italian artist Luca Cambiasi who lived from 1527 – 1585.

<Show the "Tumbling Men" (Robots) by Cambiasi>

Here's another work of his demonstrating how the shapes can be softened and you see the beginning of a human-not robot-looking form.

<Cambiasi's sketches featuring two parent/child pairs>

Even Albrecht Durer, whom we met in Cycle 1⁵ broke his human subjects down into shapes.

<Show the Durer cube-man>

Even today, artists almost instinctively break things down in their heads to simpler shapes. When they draw, they lightly draw these simple shapes, then build upon them. By the time a sketch is finished, most of these shapes are hidden beneath the layers of details.

Look at some of these:

<Here you can show any, some, or none of the samples I provided. There are three: an elephant, a peacock, and Joan of Arc. All three show original images and a breakdown, plus some supplemental information. If you don't need it, don't use it. But sometimes, it's difficult for people to see how an artist "sees" the world, and I hope these helped.>

So I have a few ways we can draw some objects. Let's try them, step-by-step together.

<There are two tutorials here: turning a cube into a book, and turning a column and sphere into a tree.>

⁵ If you did Cycle 1, otherwise, you might substitute "whom we'll meet in two years during Cycle 1,". Up to you.

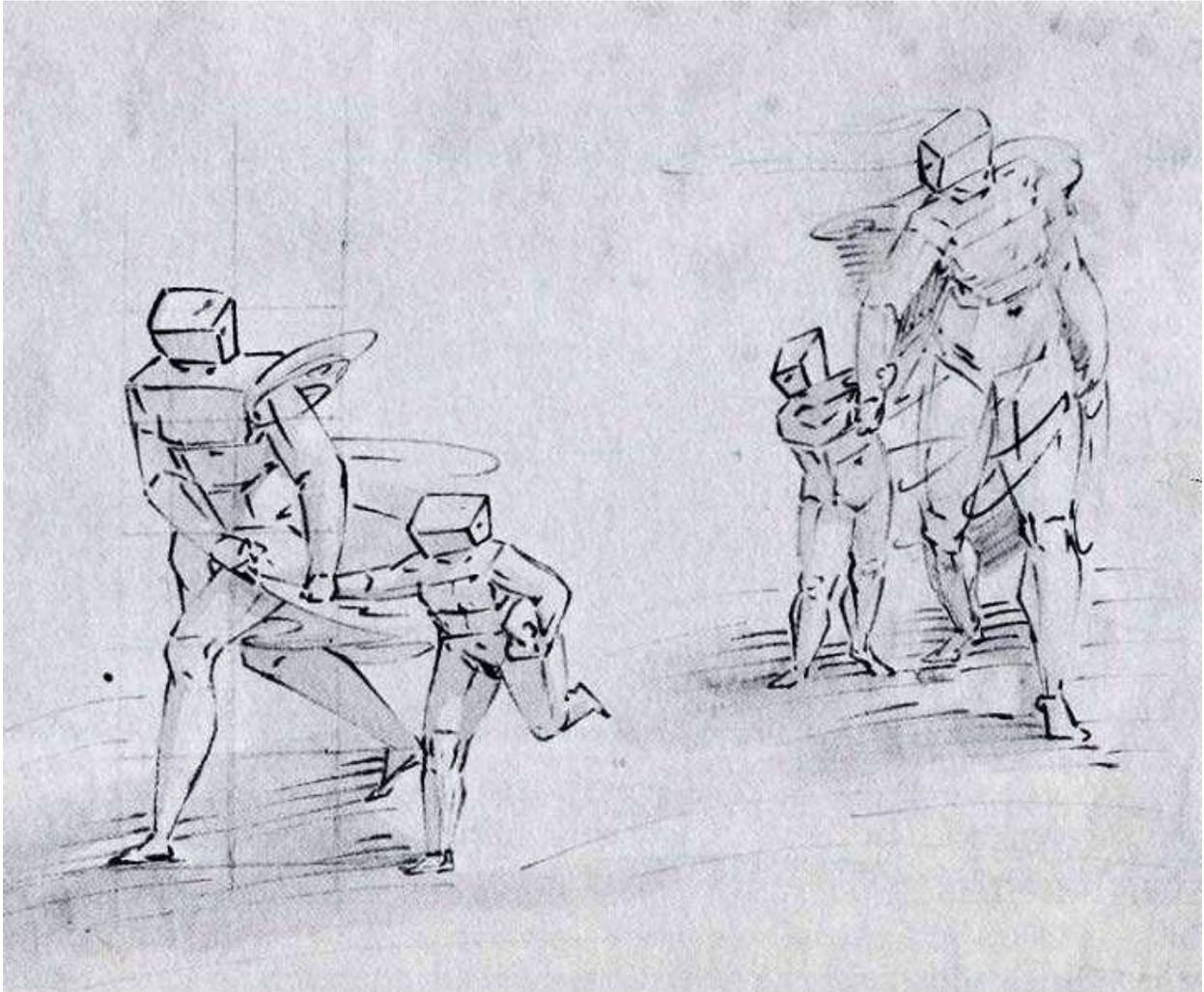
Script for Week Five Drawing Section: "Perspective"
2016-2017 / Cycle 2

Activity: Use the step-by-step guides to draw books and trees, or any other objects you'd like to draw using three-dimensional forms. The Foundations guide also suggests using these forms to draw:

- A Television
- A Top Hat (column plus oval perhaps?)
- Birthday Cake
- Christmas Present

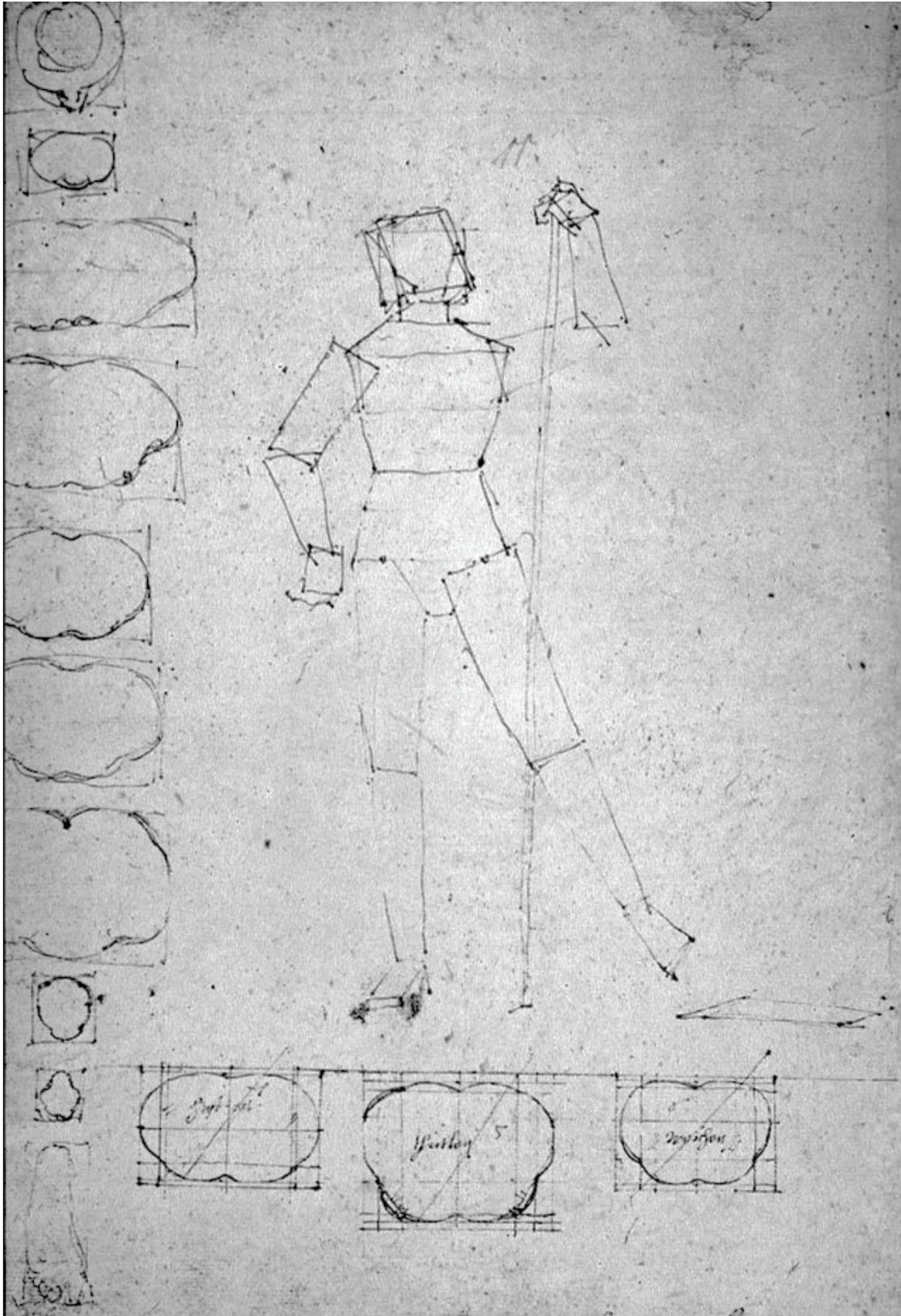
Script for Week Five Drawing Section: "Perspective"
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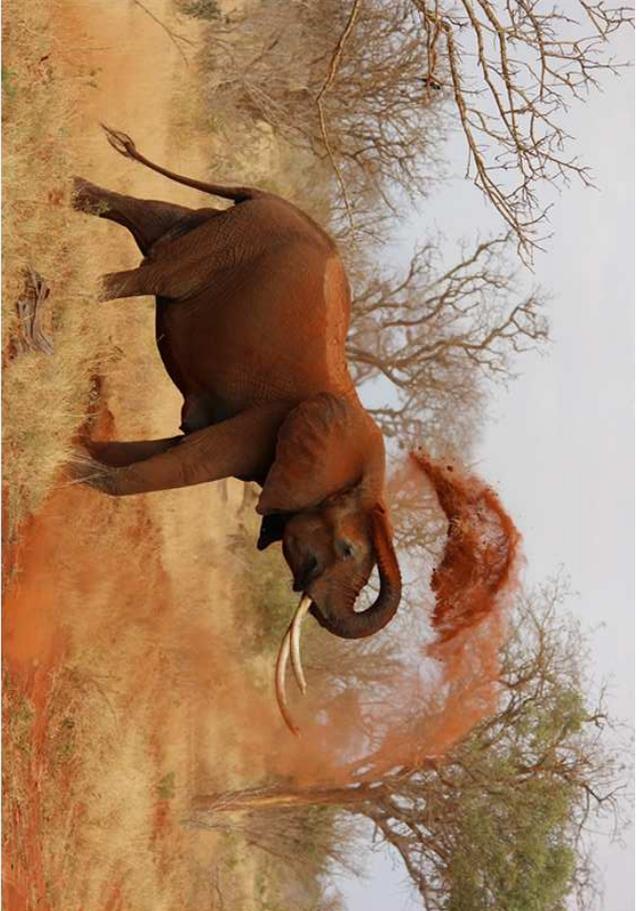


Cambiasi, Luca., Parent-Child Pairings

Script for Week Five Drawing Section: "Perspective"
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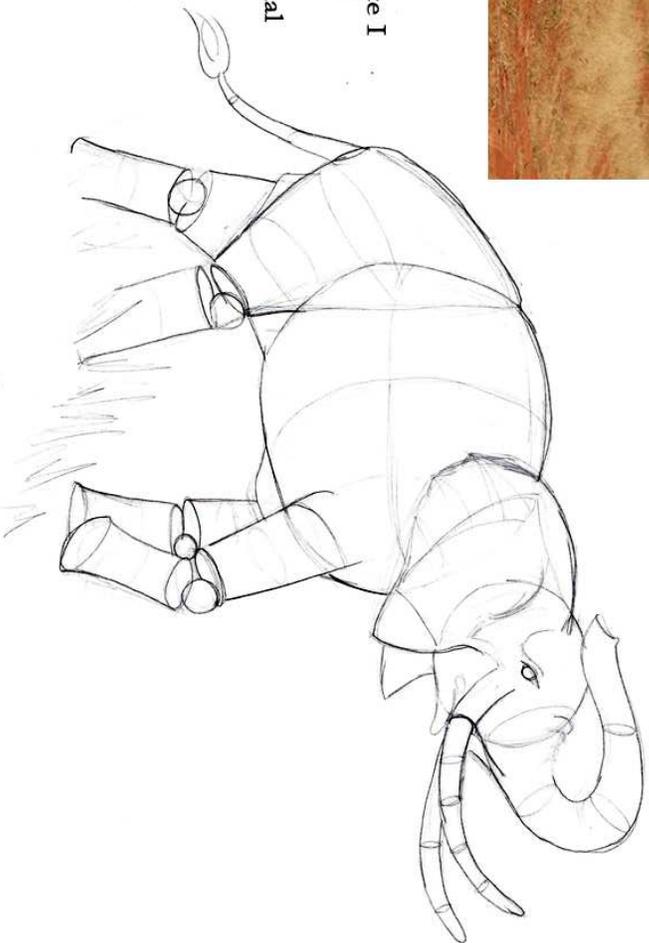


Albrecht Durer.



From the artist: Note the seeming reversal of a "knee joint" in the hind legs. When observationally breaking down a subject, I noted where a joint might be; but since I don't know how the elephant skeleton is put together, I inserted the joint-ball to indicate where I saw some roundness that may be a joint. Since this is observational drawing, the ball acts as a reminder that there is a roundness there when I start to add details. Knowing anatomy is a key to good drawing, but observation can help before you learn each individual animal or subject.

Elephant photo from a public domain library.



**Elephant broken
down to 3-D forms.**



Many natural forms are built on spheres and columns. Some columns, like the peacock's neck, can be curved, while others, like the leg segments, can be largely straight.

Peacock Broken down into simple forms.



http://www.publicdomainpictures.net/view_image.php?image=124571&picture=peacock



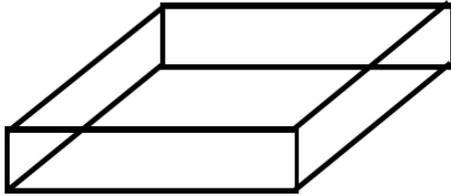
Joan of Arc
1505 manuscript illustration



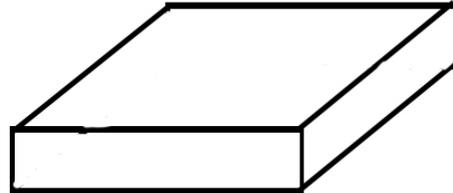
Here is Joan of Arc and one way to break her horse, and her, down to their three-dimensional forms. Each artist breaks the world down slightly differently: some start with stick figures and build from there, while others combine shapes from the beginning (like envisioning the horse's leg as a single, bent cylinder, rather than two broken by a joint). As you practice and work at seeing shapes, you will find what works best for your style and needs.

But once you've broken your image down and built a "skeleton" of the drawing, then you can most easily add details, knowing your proportions are what you want them to be.

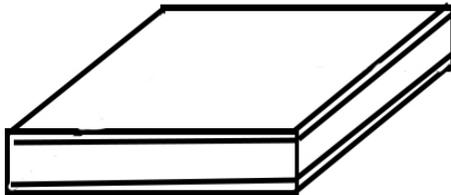
Draw a Book from a Box



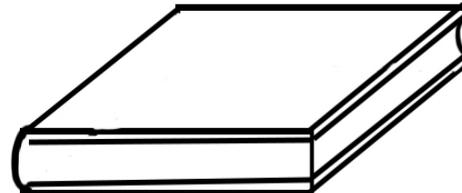
Start with a box



Erase the "back" lines as shown



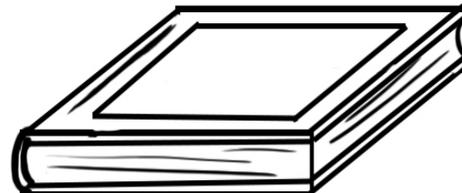
Draw the inner edges of the book cover



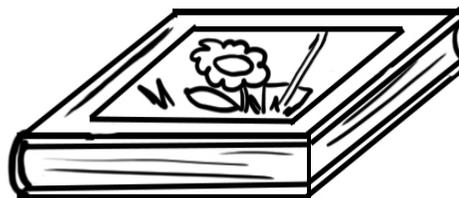
Round the spine, and the far edges of the page. Erase the old lines



Add an inner edge of the cover at the spine, a line along the spine on the front cover, and lines for pages.

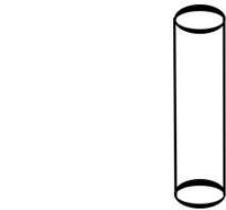


Draw a cover picture border on the front cover.

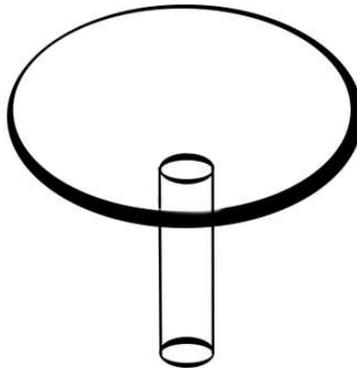


Decorate and color book cover and pages!
A box becomes a book!

Drawing a Tree



1. Lightly draw a tall, thin column. Make the base and top a squashed oval.



2. Lightly draw a sphere on top of the column. It can be circular or ovular.



3. Begin adding details: irregular leaf outlines.



4. Trace over the trunk, and add a couple of branches. Erase the column and sphere.



5. Decide where the light is coming from, and shade the opposite side.

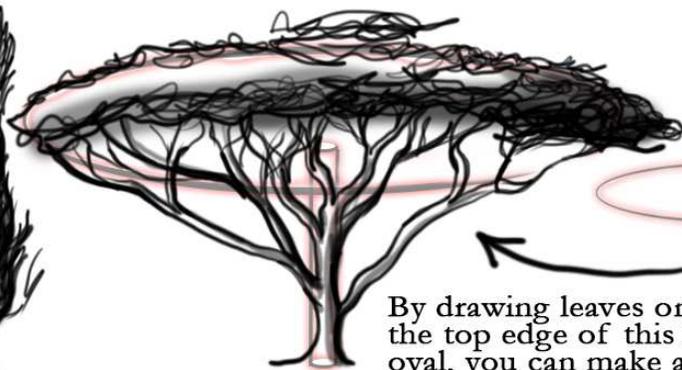


6. Add some detail for bark and leaves, and you're done!

Variations



A tall thin oval can turn into a cedar tree or a cypress tree.



By drawing leaves only on the top edge of this long oval, you can make an African Acacia tree.

Mini-Lesson 3: *Drawing One-Point Perspective*

Materials

- Pencils
- Paper
- Ruler
- ERASERS!!!!

There are three aspects to perspective. The first has to do with how the size of objects seems to diminish according to distance: the second, the manner in which colors change the farther away they are from the eye; the third defines how objects ought to be finished less carefully the farther away they are.

[Leonardo da Vinci](#) ⁶

Tutor: Today, we're going to work with "perspective". Have you ever seen photos like this?

<Show the Train track photo.>

Or have you ever seen a road like this?

<show the road photograph> ⁷

Both of these photos show how objects get smaller and closer together until they seem to "vanish" at the "vanishing Point" on the "horizon". These are some of the art vocabulary for the drawing technique of perspective, and both the photographs depict "One-Point Perspective"—where the object all seem to head for a single point in the picture.

We are going to do something similar today.

This type of art is very step-by-step process, so we're going to work on this together.

<I tried to make the tutorial easy to follow. That being said, I do encourage practicing the tutorial step-by-step before demonstrating it!>

⁶ A note about the drawing you see paired with this quotation. The portrait is from Leonardo's later career, but the landscape is his FIRST surviving drawing of his that we know of. Dated August 5, 1473, Leonardo completed it when he was 21. It depicts that Arno river valley, and the castle on the left is the Montelupo Castle. This drawing is an example of informal/zero-point perspective.

⁷ Both of these photos are listed as being in the public domain on the website pixabay.com.

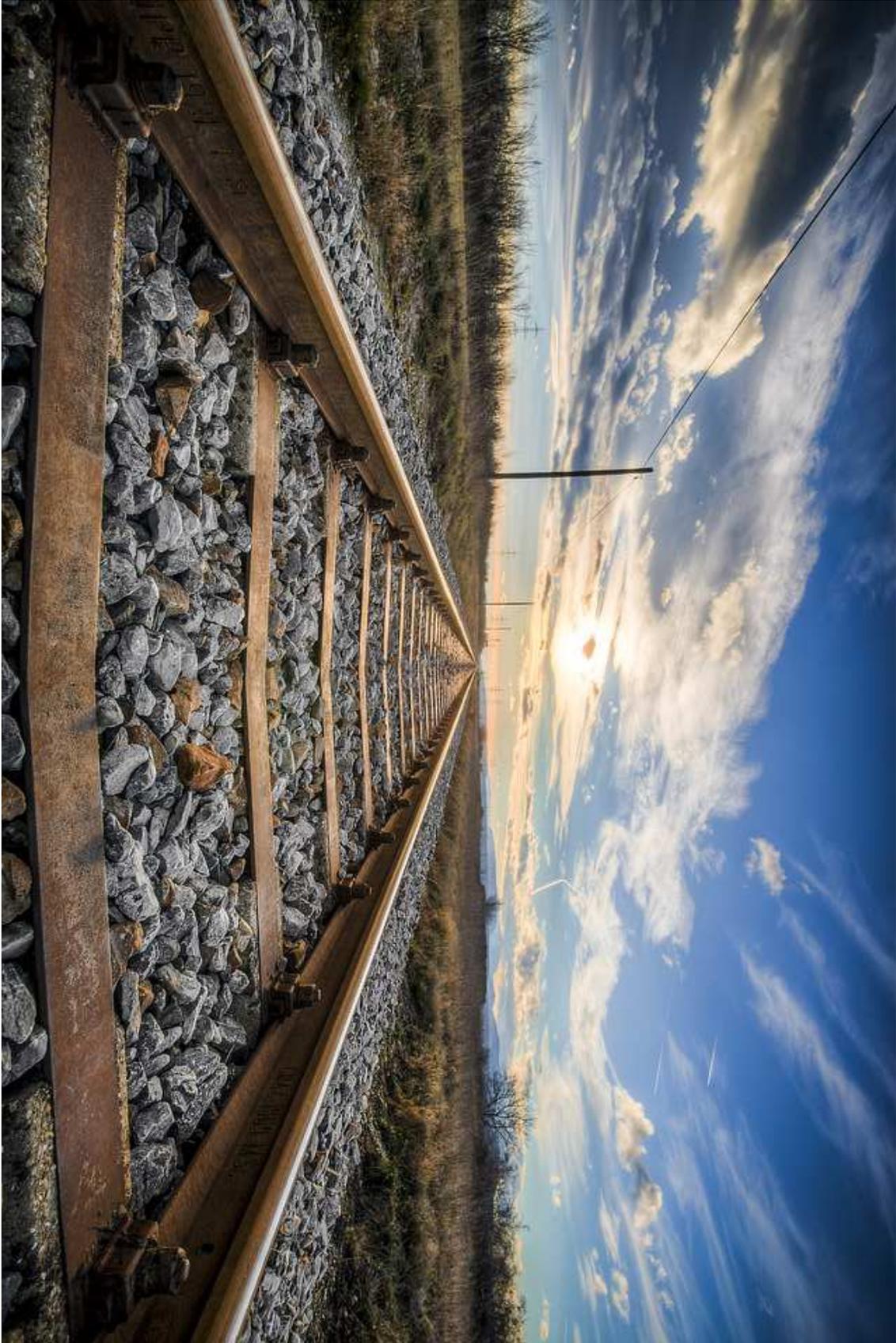
“There are three aspects to perspective. The first has to do with how the size of objects seems to diminish according to distance: the second, the manner in which colors change the farther away they are from the eye; the third defines how objects ought to be finished less carefully the farther away they are.”



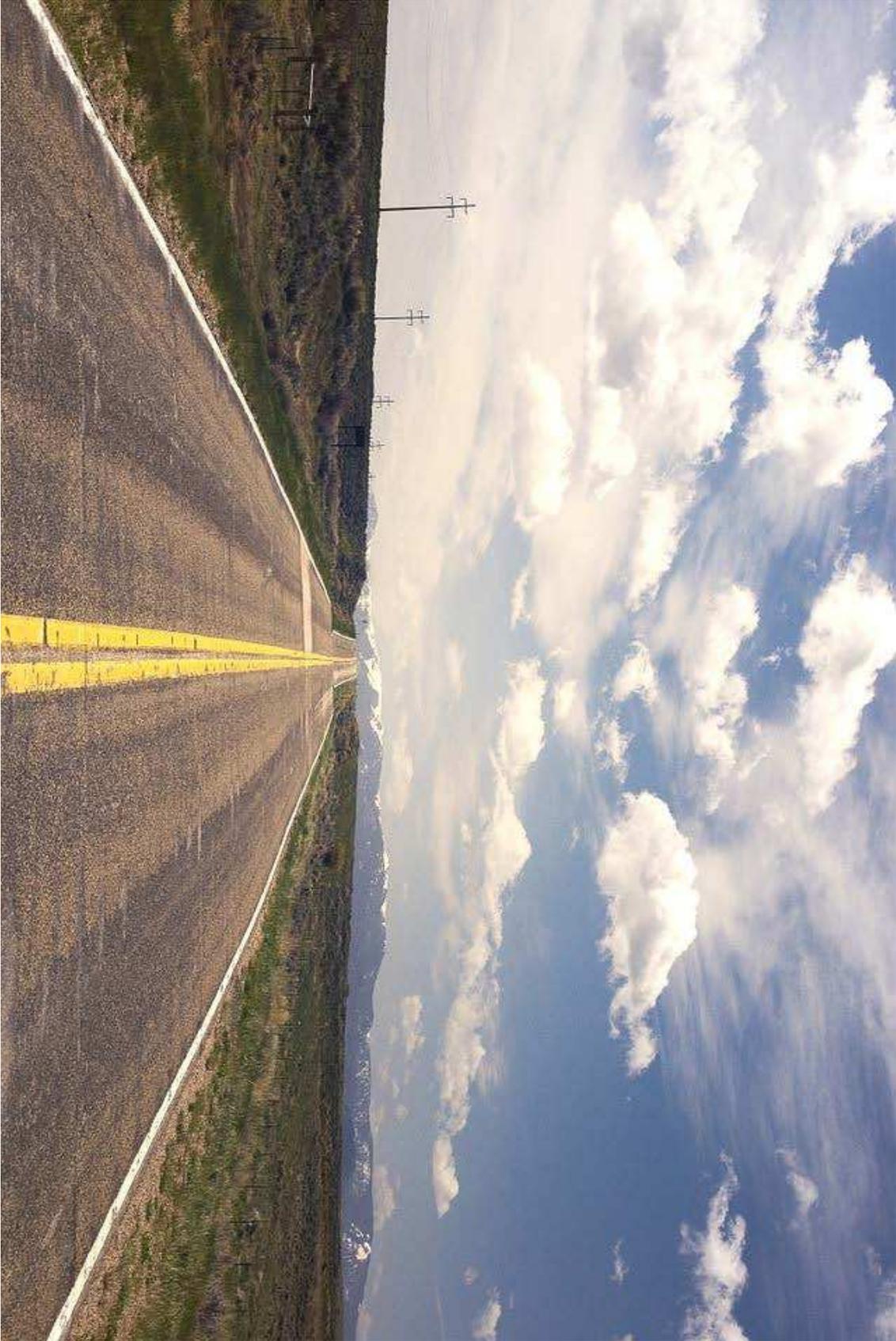
-Leonardo da Vinci



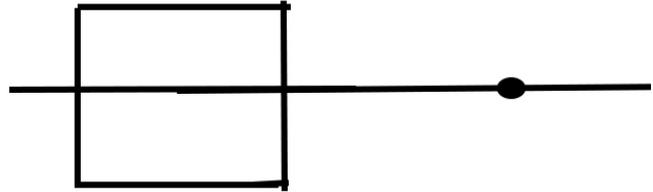
Script for Week Five Drawing Section: "Perspective"
2016-2017 / Cycle 2



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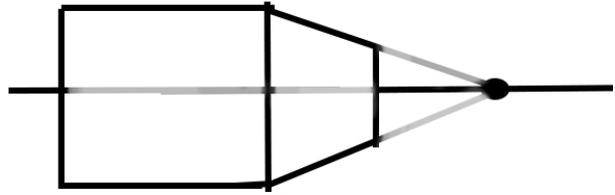
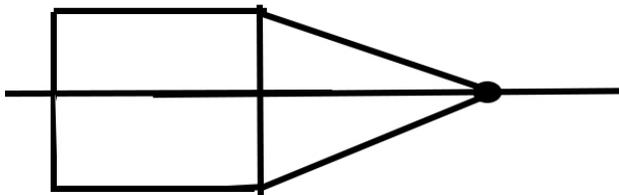


Drawing One Point Perspective.



1. Draw a horizon line and a vanishing point off-center.

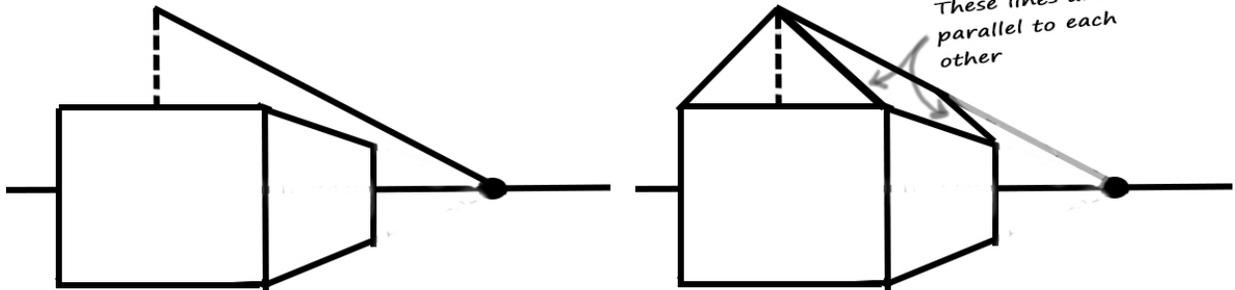
2. Draw a rectangle that extends above and below the horizon line. This is the side of the house facing you.



3. Connect the two corners of the rectangle closest to the vanishing point to the vanishing point. (you can connect all four, but the other two lines will be behind the house and completely erased.)

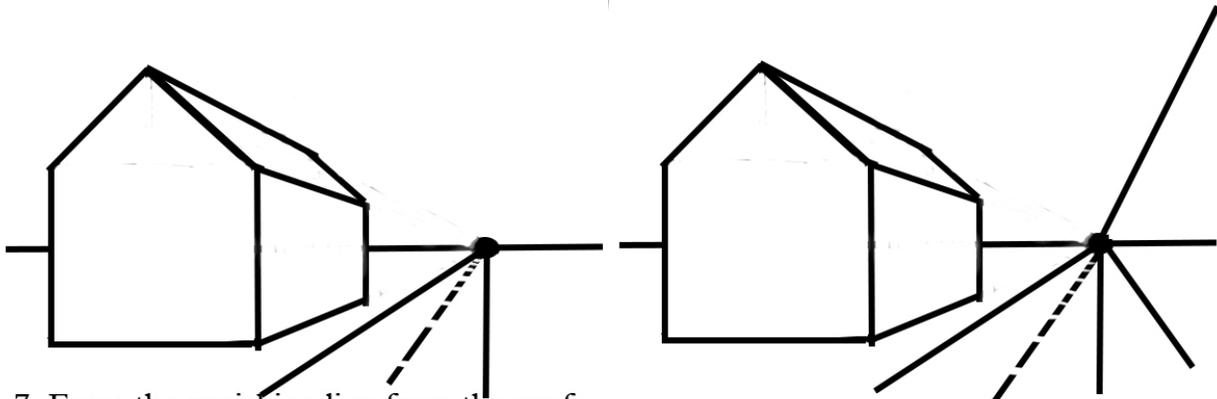
4. Decide how long your house will be, then drop a vertical line between the two vanishing lines of step #3. Erase the horizon line inside the house and the vanishing lines between the house and the vanishing point (greyed out in the example.)

Drawing One Point Perspective



5. In the center of the front rectangle, draw a line straight up. This will be the peak of the roof ridge (dashed line). Then, connect the vanishing point and the dashed line.

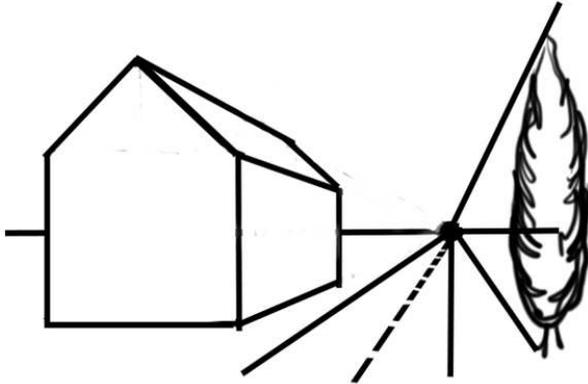
6. Connect the corners of the front rectangle and the conjunction of the dashed line and the roof ridge. Connect the back corner of the base block to the ridge line with a line parallel to the forward roof line.



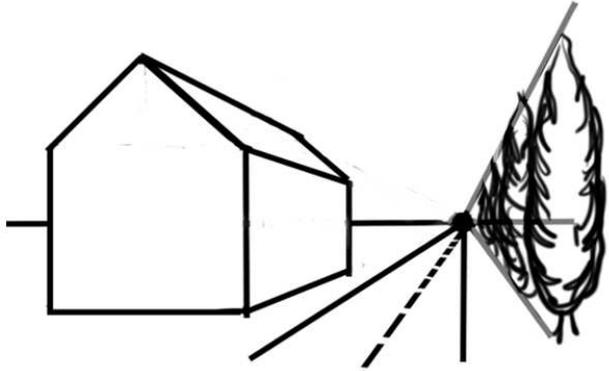
7. Erase the vanishing line from the roof ridge to the vanishing point, as well as the interior lines on the front rectangle (now a pentagram). Draw two lines as shown; this is the road. (You can add a centerline as well.)

8. Draw two more lines converging on the vanishing point on the right side of the road one below and the other above the horizon. This will be a row of trees.

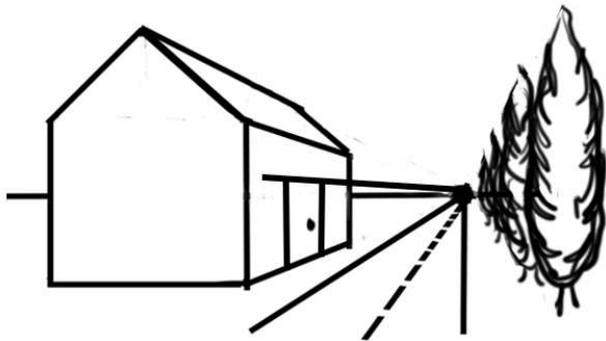
Drawing One Point Perspective



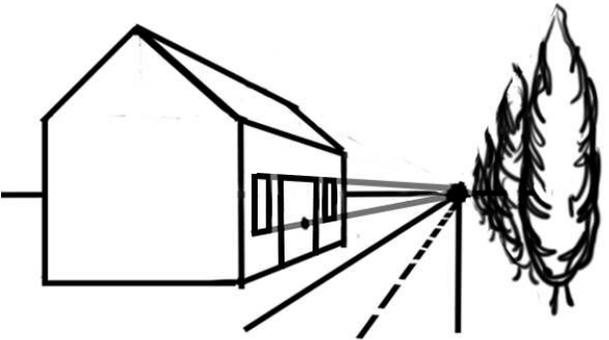
9. Draw one tree close up, across from the house.



10. Draw a second and third tree behind the first one. As long as the top of the tree touches the guideline, it will appear to be a row of the same-size trees getting smaller in the distance. Erase the guidelines and horizon lines behind the trees.



11. Add a door to the house facing the road. The top of the door will recede to the vanishing point, while the vertical lines are vertical (and parallel to the vertical sides of the house.)



12. Draw a second, lower line, out from the vanishing point. Draw a pair of vertical lines between these two vanishing lines to create windows. Erase any part of the vanishing line that isn't part of the windows or doors.

Drawing One Point Perspective



13. You can add some windows to the front rectangle. Because this rectangle is all right angles, any windows, doors or details would be at right angles as well.

14. If you want to add shingles to the roof, the bottom edges of the shingles would all align with the vanishing point. The sides of the shingles would be parallel to the edge of the roof. Once drawn in, erase any vanishing lines that are between the roof and the vanishing point.



15. If you want to add siding or bricks, similar to the shingles, the "road side" of the house will have lines vanishing to the vanishing point, while on the front rectangle, the lines will be horizontal and vertical.

16. Add a background or some clouds and you have a picture completed in one-point perspective!