# Perspective Lesson 3: Three-Dimensional Drawings, creating objects out of shapes

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 1<sup>1</sup> 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, the 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..>

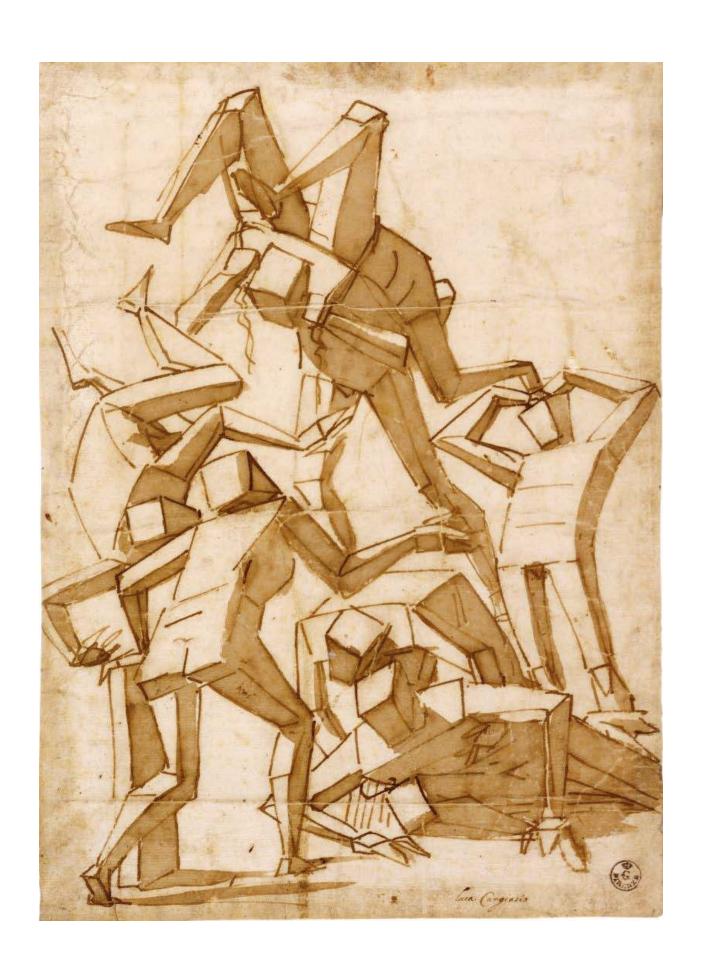
<sup>&</sup>lt;sup>1</sup> If you did Cycle 1, otherwise, you might substitute "whom we'll meet in two years during Cycle 1,". Up to you.

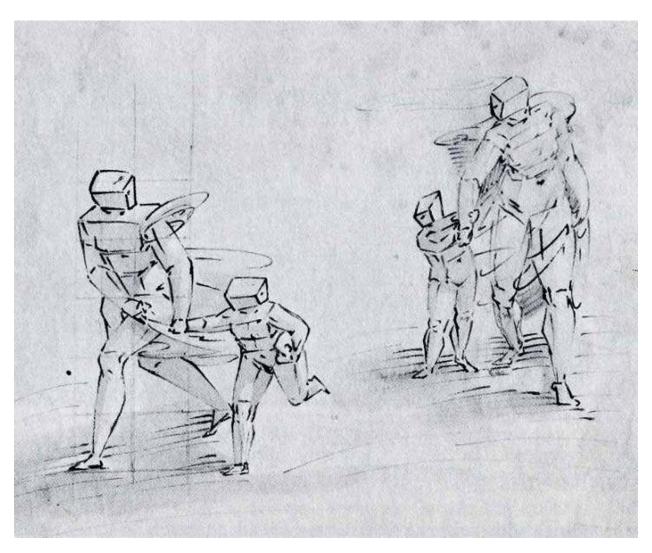
So I have a few ways we can draw some objects. Let's try them, step-by-step together.

<There are three tutorials here: turning a cube into a book, and turning a column and sphere into a tree, and turning one truncated cone plus two different cylinders into a lamp. If you finish those, challenge the students to the final drawing, combining all three objects.>

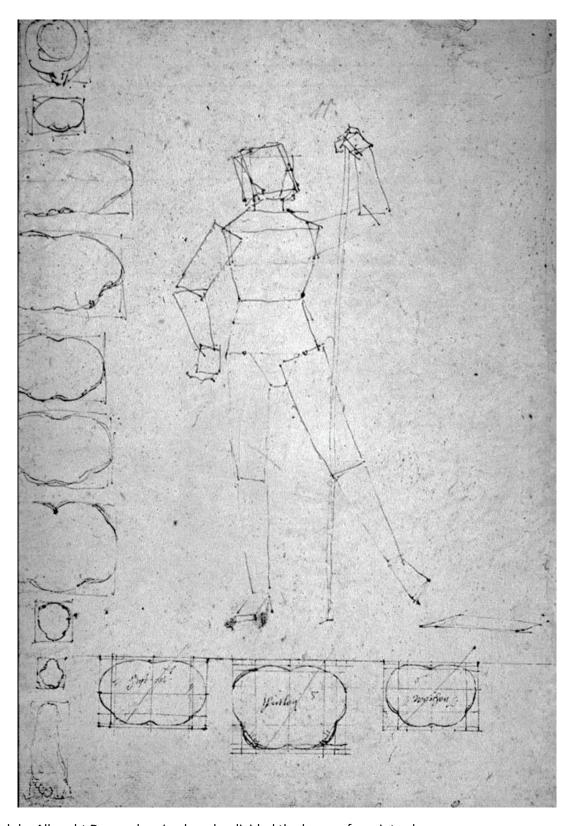
Activity: Use the step-by-step guides to draw books and trees, or any other objects you'd like to draw using three-dimensional forms. The Foundations guide also suggests using these forms to draw:

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





Cambiasi, Luca., Parent-Child Pairings



Sketch by Albrecht Durer, showing how he divided the human form into shapes.



# Elephant broken down to 3-D forms.

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.



# Peacock Broken down into simple forms.

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







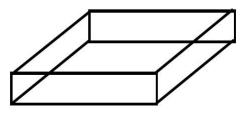


1505 manuscript illustration Joan of Arc

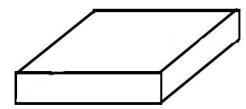
breaks the world down slightly differently: some start with stick figures and build from there, while others combine shapes from the beginning (like envisioning the horse's leg as a single, bent cylinder, rather than two broken by a joint). As you practice and work at seeing shapes, you will find what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

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.

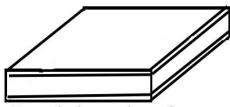
## Draw a Book from a Box



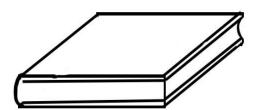
Start with a box



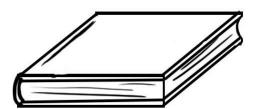
Erase the "back" lines as shown



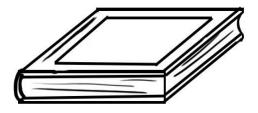
Draw the inner edges of the book cover



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.

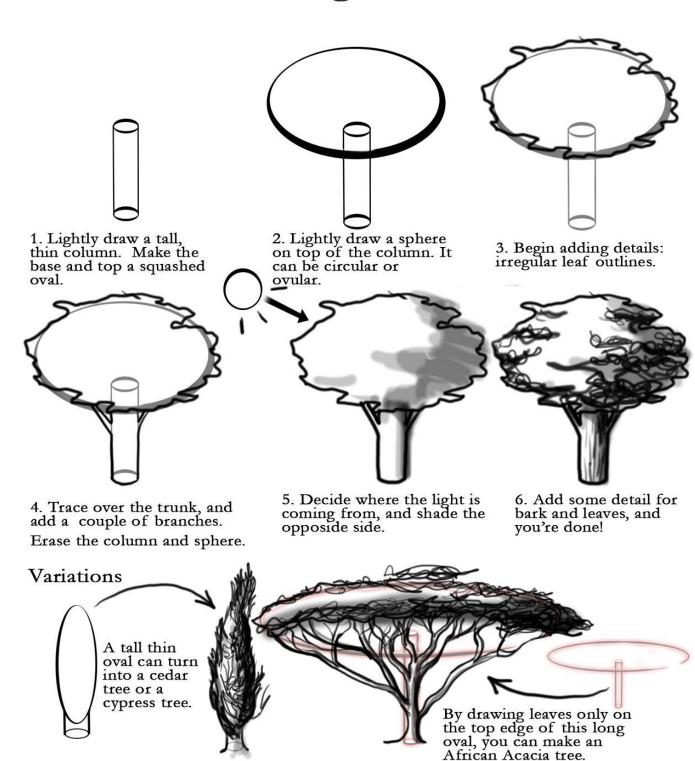


Draw a cover picture border on the front cover.



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

## Drawing a Tree



## Draw a Lamp



1.) First, draw a truncated cone. This will be the lampshade.



2.) Draw a tall, skinny column through the center of the cone, and out the bottom of the shade.



3.) Add a short, wide column under the tall one as the lamp stand.



4.) Erase the lines which are grayed out here. These are the back or interior edges of the lamp, and can't be seen. (Add a cord!)



off. If it is off, figure out where the light is coming from (in this case, the left side) and shade the opposite side. (See shading tips for more details.)



5(a). Decide if you lamp is on or 5(b): If your lamp is on, it creates its own light, and the shadows are vastly different. Follow the shade lines down to the "table" and draw a continuation of this "shade cone" on the table. Lightly shade outside this line. Follow your light source (the round dot in the center of the shade-you don't need to draw it in, I just did for reference) down to the table. Shade the side of the stand and the shadow around it. Finally, lightly shade the edges of the lampshade, as seen here. Your lamp is lit!

