Learn to DRAW A SPHERE by Bob Davies
Introduction

Why would you want to draw a ball?

It’s not the most exciting subject matter in the world, even if you’re a sports fanatic!

Yet, the sphere drawing exercise is used in Ateliers all over the world to help art students develop a very keen sense of observation.

And the reason is because the techniques you’ll learn in order to make a flat circle look like a 3-dimensional sphere, are essential for all kinds of objects and subject matter - from the more obvious apples, oranges and onions, to the less obvious human figure.

Where this exercise really shows its value though, is for portraiture. Learning how to draw a 3-dimensional sphere and how the lights and shadows interplay with each other, will help you ‘see’ the structure of someone’s head and face more clearly.

Instead of just drawing a series of flat facial features
next to each other, you’ll be able to draw a life-like face with depth and character.

Over the next few pages I’ll take you through a simple, step-by-step exercise that will help you to create an accomplished-looking sphere drawing.

And simple shape though it may be, if you’ve struggled with this sort of thing in the past you will derive a real sense of satisfaction when you get all the lights and darks in the right place.

Have a look at the reference photo below because this is what we’re going to create in pencil.
A couple of points to note:

- First, the main light source is clearly from the top right.
- Notice how much light is on the underside of the sphere next to its shadow on the floor. You might have expected this to be the darkest part but the white surface on which it is sitting reflects light back up on to the bottom of the sphere.
- The darkest shadow in this particular shot is actually quite high up on the left hand side of the sphere.
- Note how the shadow fades away quite considerably the further away it is from the sphere.

In a similar photo below, you can see I’ve lit the sphere from the opposite side and at a different angle. I’ve also sat it on a dark towel.
With the same light source but in a different position, and a on darker surface, see how the highlights and shadows change?

In this photo, the sphere can almost be divided into two halves, light and shade (left and right). In the first photo, we have almost a three-stage sphere - light on the top, a darker band around the centre and reflected light around the lower part.

So this goes to show that there’s no ‘standard’ way the light falls on a sphere. It depends entirely upon the individual image that you are drawing.

We’re going to recreate the sphere in the top picture, with the light coming from top right. Here are the materials I am using:

**MATERIALS YOU NEED**

- B graphite pencil
- 2B graphite pencil
- 4B graphite pencil
- 150gsm drawing paper
- Putty / kneadable eraser
- Torchon / blending stump

I’m using a piece of 150gsm drawing paper which has a little bit of tooth. This is much better than photocopy / printer paper, as you’ll struggle to get the really dark values you need with that.

A torch is essentially a piece of paper formed into a tight pencil shape with a point that we use as a blender. If you haven’t got one of these, you could use a cotton bud almost as easily.

I’ve used an appropriately sized glass to **lightly** draw around to create a circle for the ball. The oval shadow shape has been formed by taping a suitably sized piece of card into a circle, then lightly squeezing it into an oval before drawing around it.
You could do the same with a roll of sellotape or the plastic lid from an aerosol can. You could of course do it freehand if you have a steady hand. Don’t worry if it’s not a perfect oval as this exercise is more about seeing the highlights and shadows than the shape.

We start by using a 2B pencil to shade in the background around the top of the ball. Notice the way I’m holding the pencil away from the point and at an angle that will allow me to apply a relatively even coating without pressing too hard.
Here I’m using the corner of the putty eraser which I’ve stretched into a slight point, to tidy up around the top of the ball.

We’re now using the torchon in a circular and side to side motion, to blend together the background pencil work. Again note the way I’m holding the torchon to make sure I get as much of its pointed end to lie flat on the paper, to aid the blending process. I’ve started to lighten off the lower background by dragging some of the graphite from the darker areas.
Now I’m using the HB pencil in a circular motion to start to add light shading to the ball. This will be the mid-tone and will either be strengthened later with shadow or lifted out with the eraser for highlights.

Back to the 2B pencil and I’m adding some of the darker tones in that central band on the ball. Compare with the photo below.
You can see the ball is now starting to look three-dimensional now that we’ve blended that light and medium value shading with the torchon.

With the 4B pencil I’ve started to add the cast shadow of the ball. I’ve scribbled from side to side to help re-create the flat surface it is sitting on.

Notice that I’ve also kept the shading well within the feint shadow guide-line. This will allow me to gently fade the shadow to just beyond the line. All shadows become lighter and less distinct, the further away from the object that’s casting the shadow. This is because more light is able to find its way around the object and dilute the shadow.
I’m using the 2B pencil, again held flat, to develop the initial fading process, shading to just short of the line.

Remember what I said about reflected light on the base of the ball? I’m creating that here by lifting out some graphite with the putty eraser. I’ve pulled a small piece of material from the eraser and manipulated it into a small rounded stub, ideal for working on small areas. Gently does it!
Back to the torchon to gently blend that light area so that we have a smooth transition to the darker area above it. If you don’t get it right first time, don’t worry. Lift out with the putty eraser or add a tiny touch of pencil and use the torchon till your happy.

Now blend the whole of the ball to make the pencil work as smooth as possible. Don’t be afraid to add a little bit of pencil here and there if it needs it before blending back again. With care you will be able to create muted highlights on the top without using the eraser. We’ll come back to that just before we finish.
Add a dark line with the 4B pencil in the shadow area right next to the ball (see the arrows). This will subtlety help to separate the two areas. Then finish the shadow blending by fading the pencil work out to almost nothing, as in the picture.

Now is the time to lift out the main highlight on the top of the ball to really give the sketch punch. Be careful as you don’t want to have to re-instate the shadow area in the background, though with a little patience, small blemishes can be easily tidied up. Again note the way the eraser has been kneaded into the required shape.
And finally, here is the finished exercise. You can see that the transitions from light to dark and vice versa give the object a lovely rounded, three-dimensional shape. You can use this principle for any round - or vaguely round - object as we discussed at the start.

Do have a go at this. It’s actually quite a nice exercise as well as being instructional, and a real benefit to honing your observational skills!