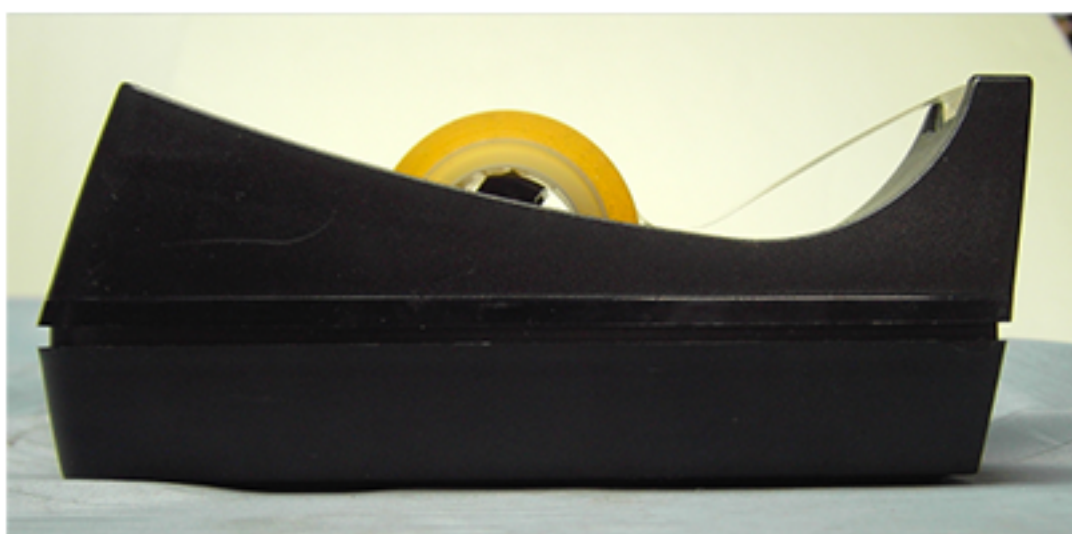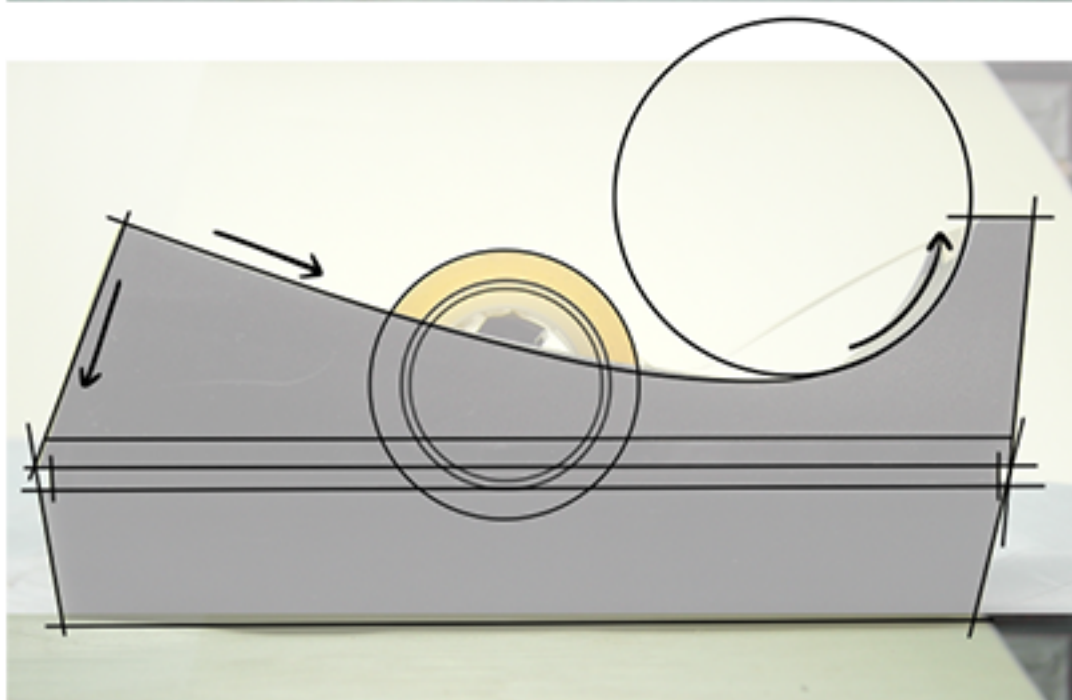# Sketching with Simple Shapes

An object that seems complex at first can be broken down into easier-to-understand lines and shapes, such as rectangles and circles.
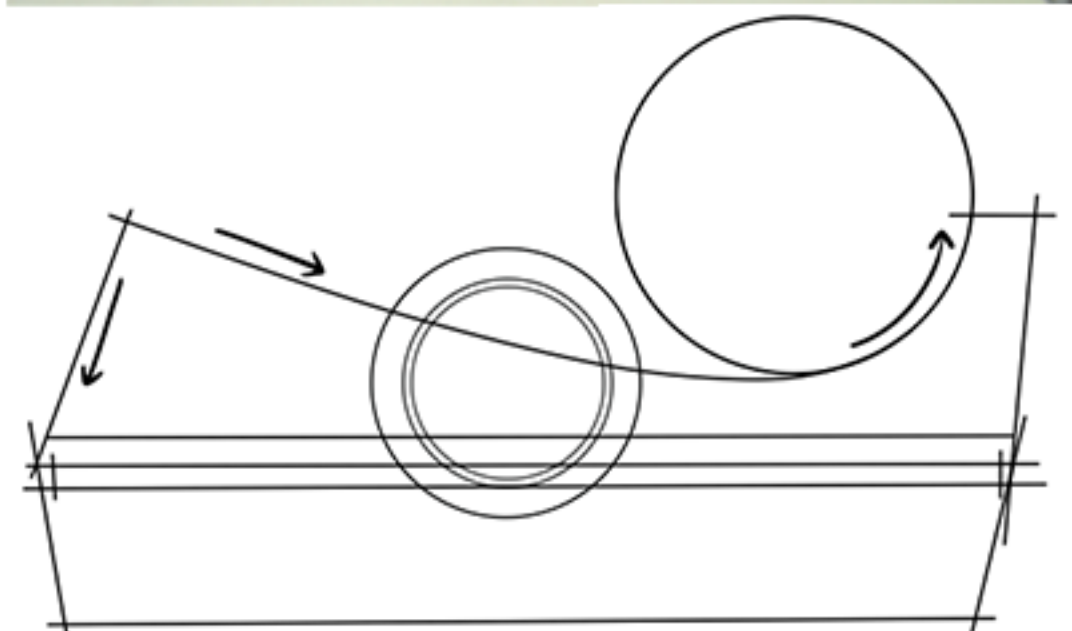

The tape dispenser to the right has complex curves and angles that can be broken down into simple straight lines and concentric circles.
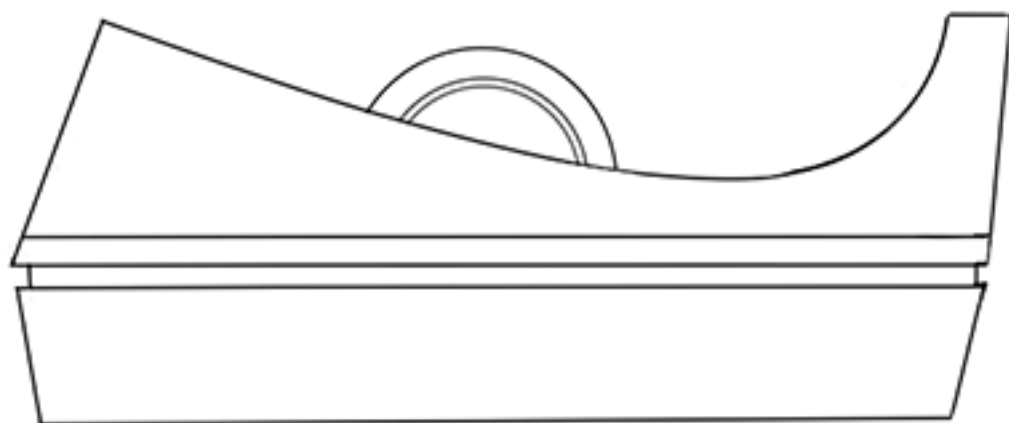

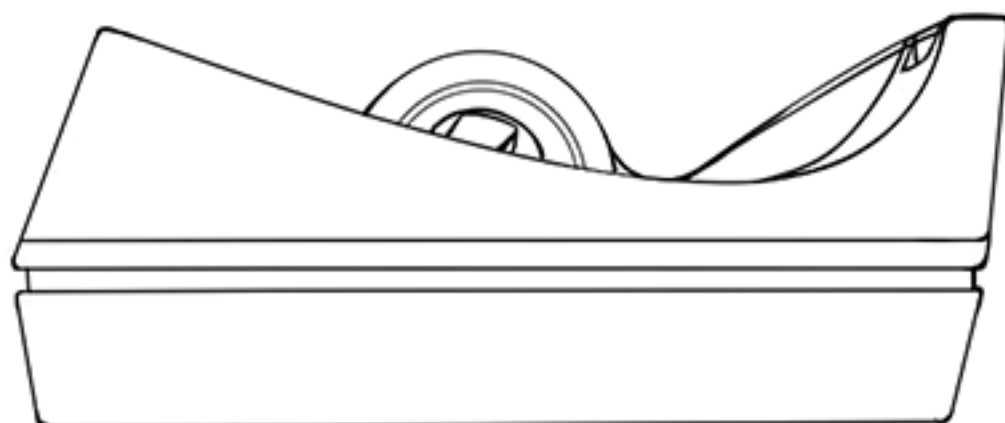The sketch may appear messy at this point, but that's okay!

Note how the complex curve of the top of the dispenser can be broken down into two angled lines and part of a circle.

After you have the basic shape down, clean up the sketch by erasing outlying line endings.

You can start detailing the sketch by adding in rounded corners and smaller details where appropriate.
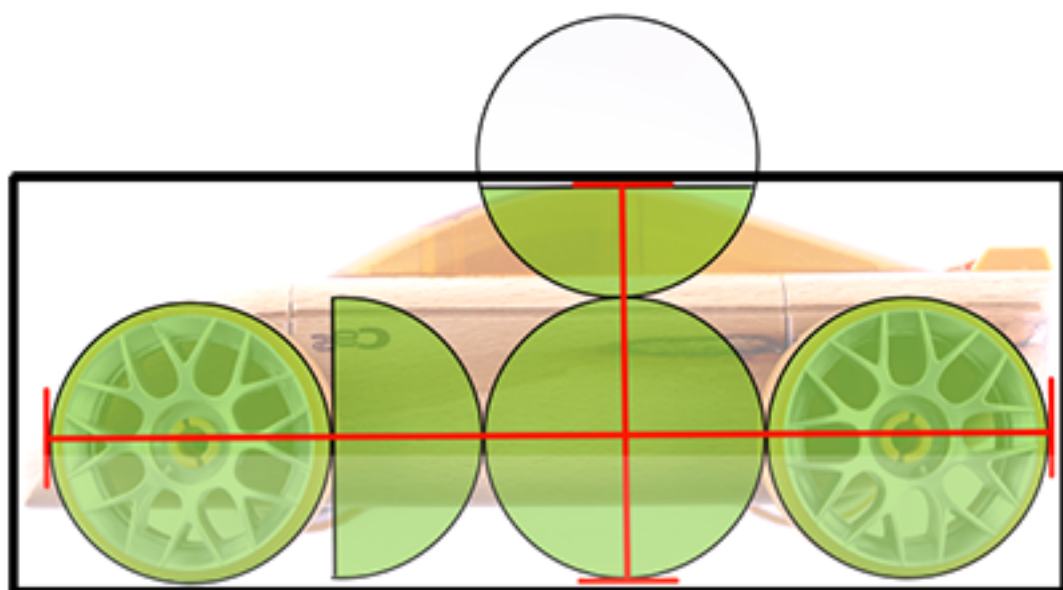
Sketching with Proportions

A trick to drawing correct proportions is to break the object down using a simpler component of the object. In this case, we'll start with the **wheel of the car.**

In terms of 'wheels,' the car is about 3.5 wheels wide and 1.4 wheels tall. We can use these rough proportions to box in the object's proportional guidelines. **Hint: When drawing cars, it is easier to get the proportions right if you draw the placement of the two wheels first!**
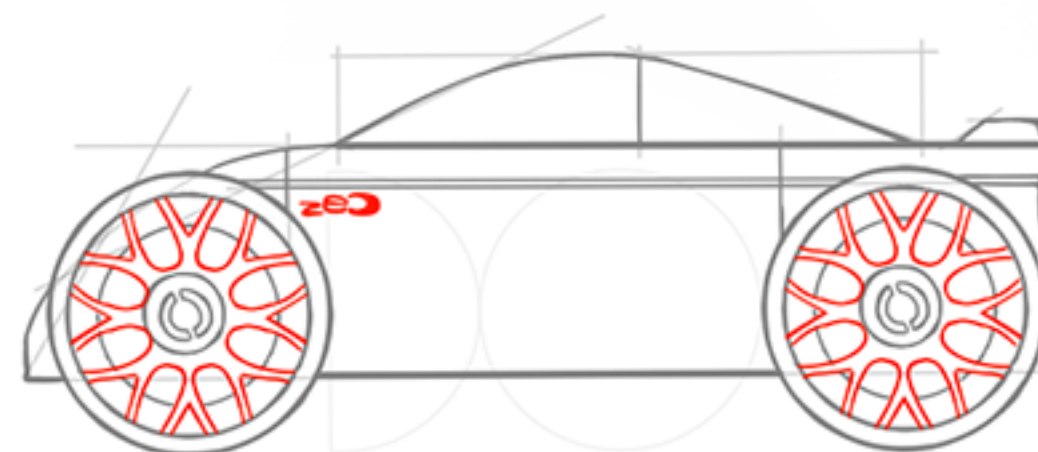
After breaking down the rough proportions, use simple lines to break the object down into simple shapes. (See: Sketching with Simple Shapes.)
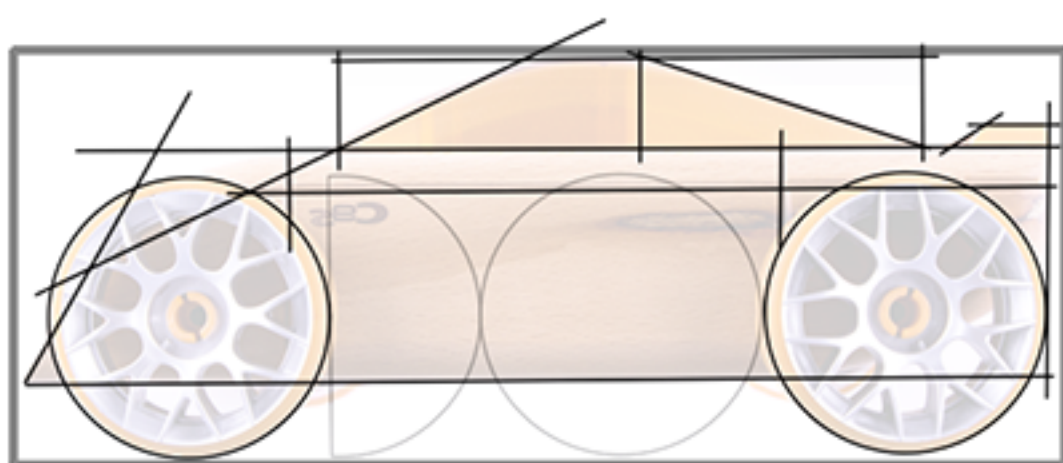
After breaking the object down into simple shapes, you can start rounding out certain details such as curved surfaces.
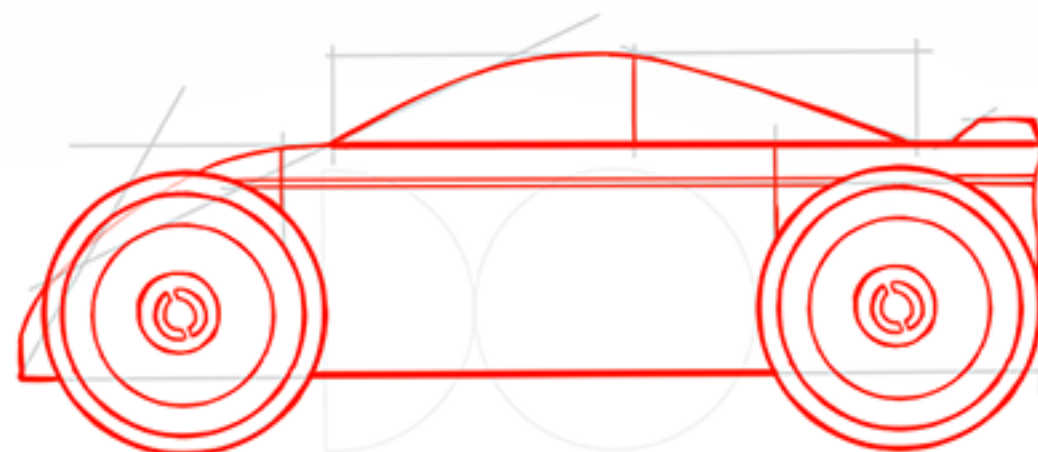
Add in the rest of your details, and you're ready to shade in your sketch!

Sketching with Curved Objects

When drawing curved objects, using simple lines to break down a shape is not enough!
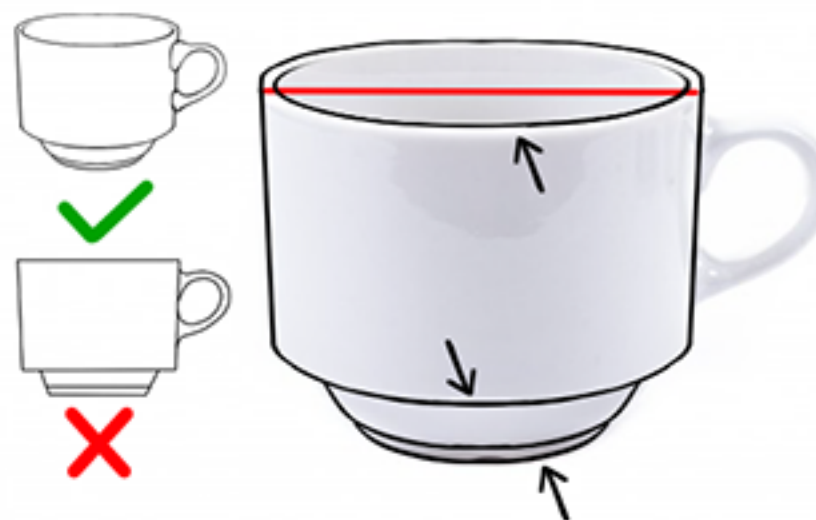
A curved object, such as this cup, will not appear to have straight top and bottom edges even when looked at directly at eye-level.

After using flat lines to box in the shape of the cup, you will need to curve the edges of a curved object to properly convey its shape.

Remember to fill out the rounded edges of a curved object.

Don't just stop at the flat, boxed-in sketch!

Note the difference between the flat, red line, and the curvature of the top edge of the cup.

Note how the curvature persists in the bottom edges of the cup as well.

Hint: The curved edge of an object changes depending on how you're looking at it. The further away the edge is from your eye-level, the more rounded it becomes.

Note how the top of and/or bottom of a hollow curved object forms an ellipse. This is visible at the top of the cup in the example above.

Image referenced from http://www.idsketching.com/ with permission.

Sketching with Shading

Tip: When shading with a pencil, try to avoid using the tip of your pencil's graphite and instead use the side of the graphite.

If you're using a mechanical pencil, try wearing down the tip of your lead to an angle to simulate this.

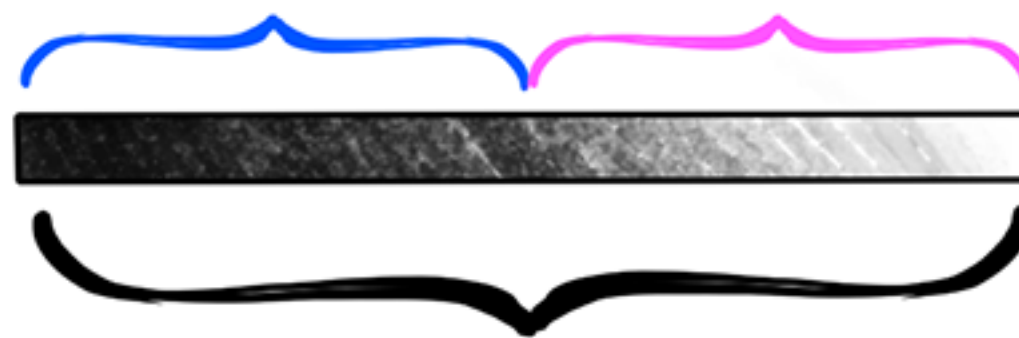This covers areas easier and makes the shading smoother.

Don't be afraid to use a wide range of values to create contrast, but don't overdo it!
Not every object will use the full spectrum from white to black.
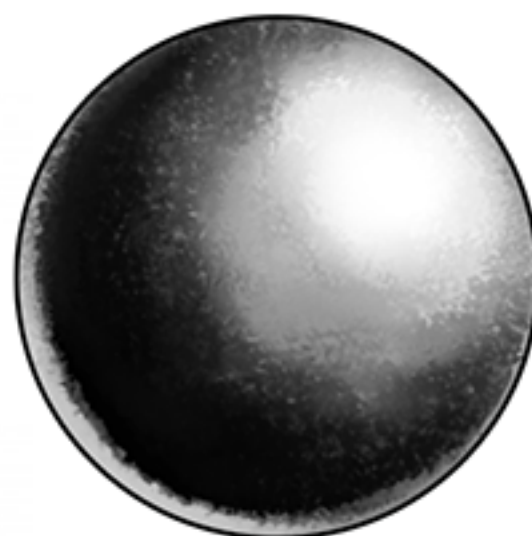
Example of values that may be used for a dark colored object.

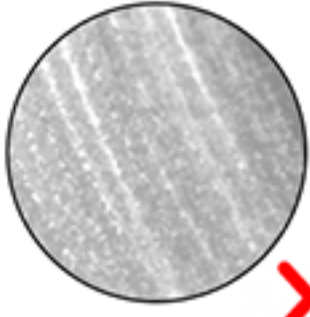Example of values that may be used for a light colored object.

Very few items will use the full spectrum from white to black. Notably: metallic objects, dark-colored objects with extremely bright lighting, etc.
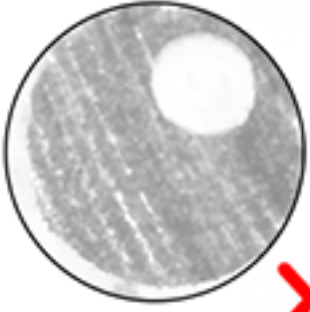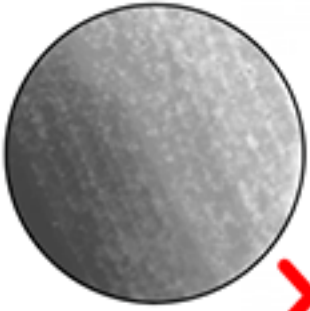
Light Source

Sketching with Shading

Avoid coloring in objects with only one tone. Even flat objects have a range of values, even if it's a very small range.

Avoid harsh blocks of highlight and shadow. This is unrealistic and makes things look cartoony.

Avoid using flat gradients for shading curved objects. Note how for curved objects, the shading follows along the curve of the object and is not flat.