

# BASICS: VOLUME — ANGULAR

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An Art Skills Tutorial

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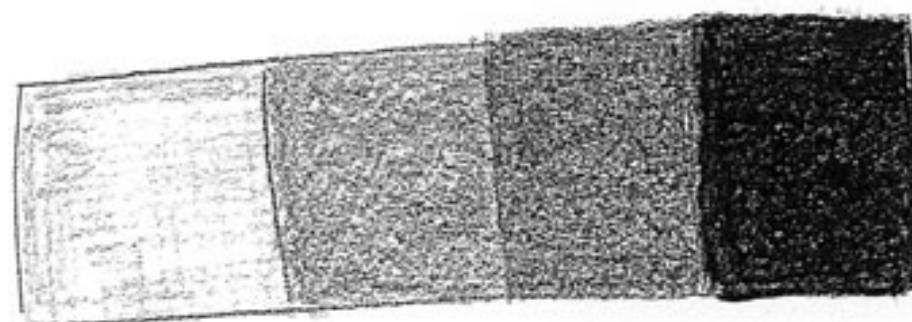
TRIANGULAR PRISM

*When setting up the triangular prism in a one directional light source, keep turning the solid until you can see three values on two sides and the top.*

*Decide which is darkest and lightest.*

*Decide how close the middle tone is to the other two.*

*Think of the value exercise we began with.*



*(See Basics: Pencil Technique.)*

*First, practice drawing the shape after making the following observations:*

*Look at the angles in the triangle at the top of your prism.*

*Observe the angle created by the two sides in view at the bottom of your prism.*

*For our purposes, the bottom left edge will be parallel to the top left edge, because the object is not large.*

*Likewise, the bottom right edge will be parallel to the top right edge.*

*Remember to avoid heavy outlines, as they will not allow you to adjust easily and they flatten out your object.*

## EXERCISE: TRIANGULAR PRISM



*Start by making the triangle seen at the top of your prism.*

*Drop the middle vertical, lightly, from the top to an approximation of where the bottom would be.*

*Draw a “V” shape with the angle you have observed, guided by the top edges.*



*Remember that each bottom edge will be parallel to the edge directly above it.*

*Your verticals will need to be very parallel to each other and to the sides of your page.*





*It can be harder than you think. What could be improved in A and B?*



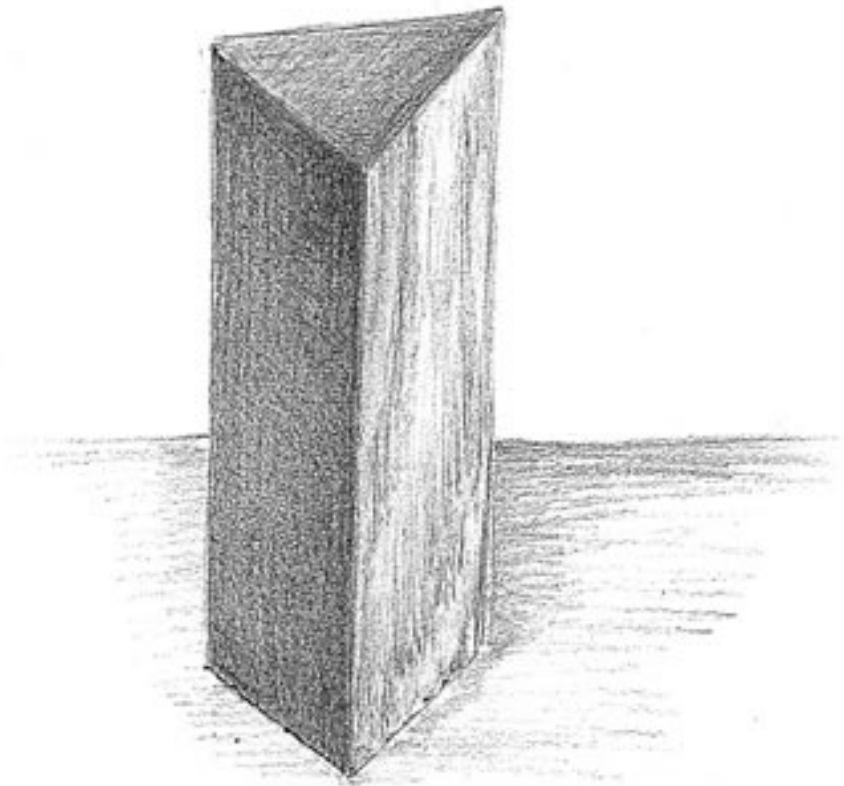
*Compare the bases with the tops.*

*Check the verticals.*

*Verticals, when not aligned properly, are most noticeably in error.*

*Once you are satisfied with your shape, you can proceed to shade it after deciding on the relative values of each surface.*

*Where is  
the  
greatest  
contrast?*



*It will be at the change of plane.*

*You can accentuate this contrast by making  
the darker plane slightly darker at the edge  
that meets the lighter plane.*

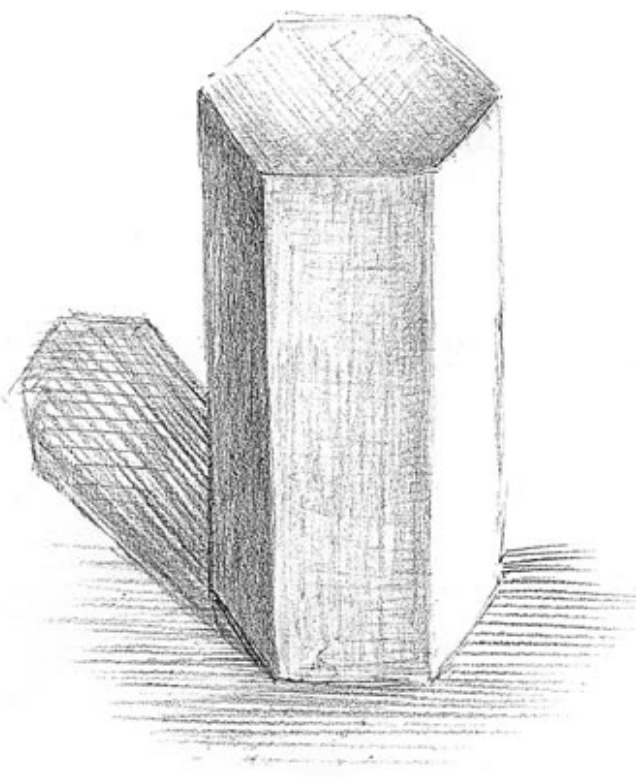
## HEXAGONAL PRISM

*This will make it clear that there is a change of plane, and resultant change of value, due to the change in the light reflecting off the surface.*

*As with the triangular prism, there will be parallel edges to guide you.*

*First pick up the solid and study it from many angles.*

*You will notice that the slightest change of view will greatly effect the objects appearance, the edges you will be able to view, and how much of each one, and the shape of the end in view.*



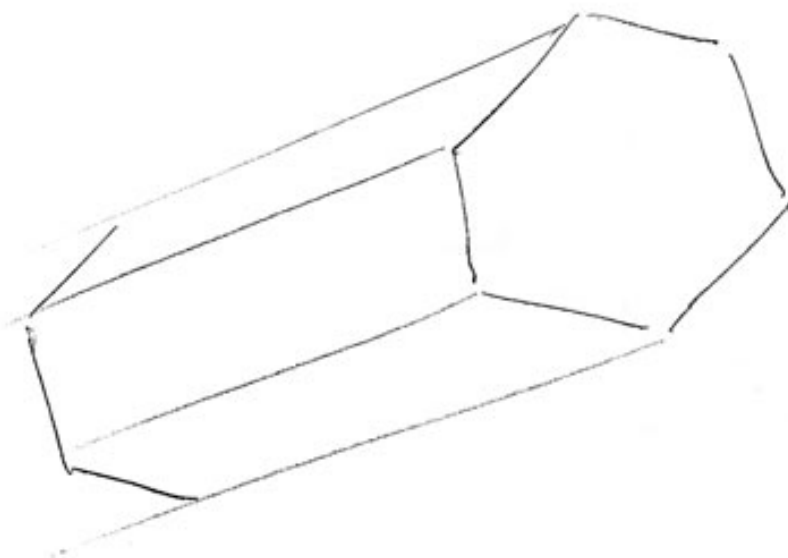
*Set up your hexagonal prism vertically for one study.*

*For a secondary study, try propping it up on something, in such a way, so as to see the top edge and three of its sides.*

*Use a directional strong light source for optimal clarity.*

## EXERCISE: HEXAGONAL PRISM

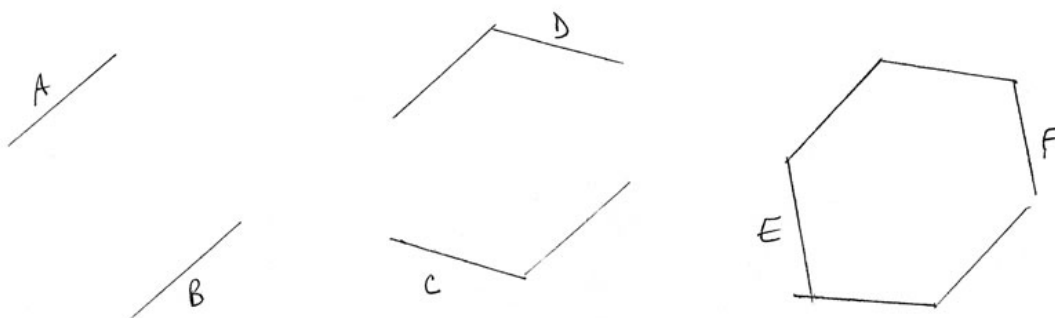
*Start with making the hexagon at the top of your prism, avoiding dark outlines, as we have been doing all along.*



*Look for parallel edges.*

*For our purposes we will treat the sides that are parallel in 3-D to be parallel in 2-D. Some will not strictly be parallel in 2-D due to perspective, but because the objects are small, the effect is negligible.*

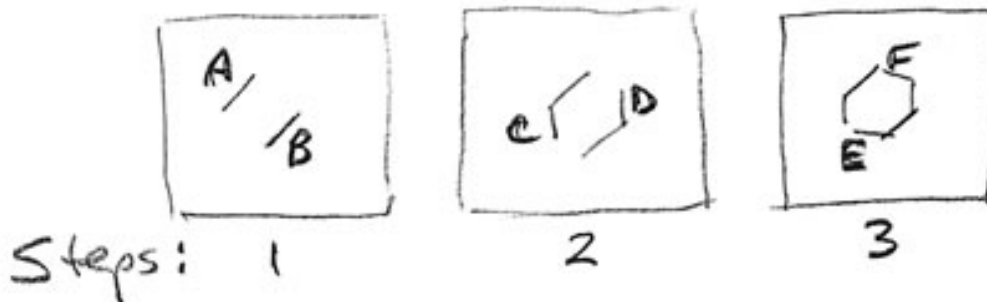
Try to create your hexagon in the following order.



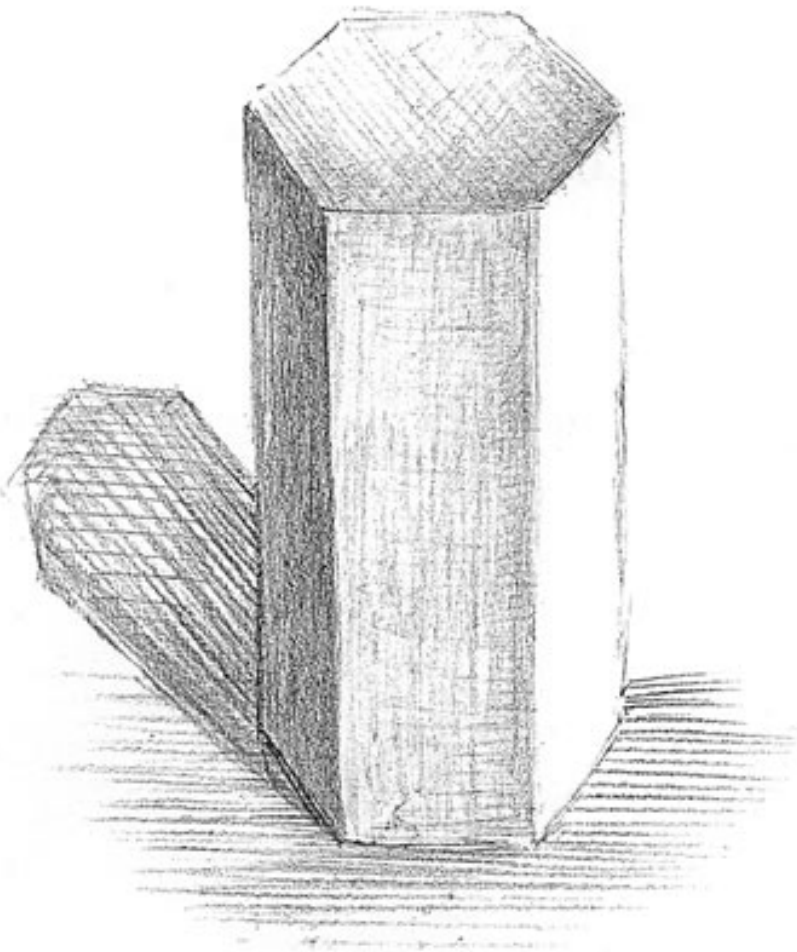
You will likely need to draw this multiple times before you see the relationships between the opposite and adjacent sides, the angles and sizes correctly.

Use a mixture of eyeballing and ruler for measurements and straight edges.

Then try it freehand without the ruler.



*You will be pleasantly surprised when you do this freehand, after you have studied the context and practiced seeing this form.*



*Compare your before and after results.*

*Try holding the pencil at midpoint and drawing, especially the long lines, by moving your whole arm.*

*Practice in the air.*

*Do it quickly.*

*Turn the paper to find the most comfortable way to draw.*

*This will give you straighter, steadier, and cleaner lines.*

*Do it lightly again and again.*

*When you have what you like, you can then shade it.*