

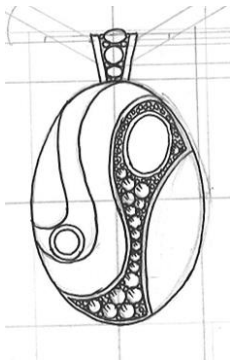
Enlarging, Reducing & Distorting Design



Creating Jewellery Lines Effectively

Enlargement and Reduction for size variations

It is common to draw matching pieces of jewellery within a set - pendant with matching earrings or bracelet, matching ring or any other kind of accessory which will be worn at the same time and needs to be a continuation of the same theme. While using tracing paper is a wonderful way to reproduce the same design in different directions and combinations joining parts of design segments, it often increases the volume of the design and sometimes produces jewellery too large (and eventually heavy) to be practical. This is where understanding how to quickly enlarge and reduce is a valuable technique so as to maximise your designing potential.



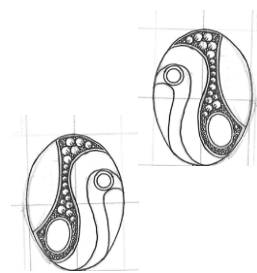
Pendant in actual size



Earring in same size is too large



Reduced size for earring is preferred



Perfect size for earrings



Pendant too small and insignificant



Enlarged size for pendant is preferred

Today with the technologies surrounding us one would find it easy to use a photocopy machine to enlarge or reduce instantly and of course this would be a perfect solution but there are fast and easy methods to get the same result in case that option is not available and the deadline needs the work to be complete sooner rather than later. This technique can be quickly and efficiently executed at the drawing table without wasting any valuable time.

Enlargement and Reduction to enhance creativity

Using the tracing technique already described in the earlier project we can also combine the information of enlargement and reduction techniques explained below to boost our creativity and add more options to the jewellery line sets. By combining these two techniques together the potential for many new and exciting design increases multi-fold.

Use enlarging and reduction techniques to boost creativity and produce unlimited designs with common themes for entire lines of jewellery.





Demonstration of fast Enlargement

The Instructor will guide you through the steps to easy enlargement. Watch carefully and discover how to then use this technique to develop your own matching jewellery line.

Step 1

Sketch an earring in actual size onto the white paper with the HB pencil. Pay particular attention to the outline and the negative spaces. Leave the details to last. Trace the shape with the black ink pen to produce the sharper definition.



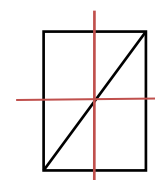
Step 2

With the HB pencil and triangle template draw a box around the exact outline of the object in whatever the actual length and width ratio might be. Add a diagonal line running from the lower left corner to the upper right corner of this box. This diagonal line is the most important line in the enlargement process.



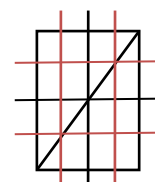
Step 3

By eye quickly divide the box in half by drawing a vertical line and where this line cuts the diagonal then draw a horizontal line dividing the box into 4 quarters.



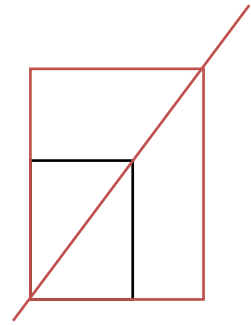
Step 4

Divide each quarter again in the same way to result in sixteen sections. Each time the vertical line hits the diagonal is where the new horizontal lines will be drawn. Perfect measurements are not necessary by make sure each section is as close as possible in size and shape to the eye.



Step 5

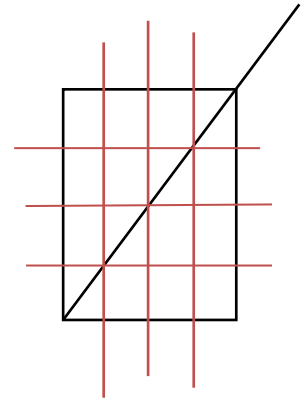
Extend the diagonal line by 2 to 4 centimetres. Extend the left side of the vertical outline up by around 2 to 4 centimetres and decide how much larger the design will need to be. Draw the new top for the box (parallel to the bottom of the box) along from left to right until it reaches the diagonal line. Where the two lines overlap draw a vertical line down to the bottom of the box.



Notice that the new box albeit larger in size has the exact same length to width ratio as the original. This is because the diagonal line has remained the same.

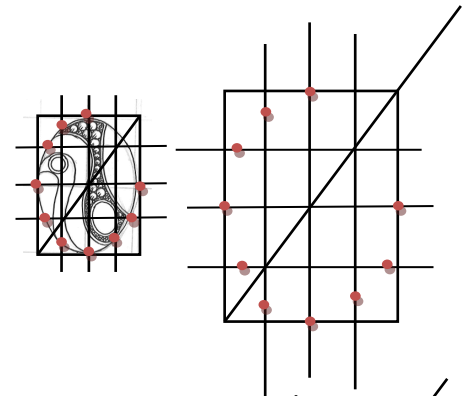
Step 6

Trace this new size box onto a piece of tracing paper together with the extended diagonal line and divide the box into 16 equal parts in the same way as described in Steps 3 and 4.



Step 7

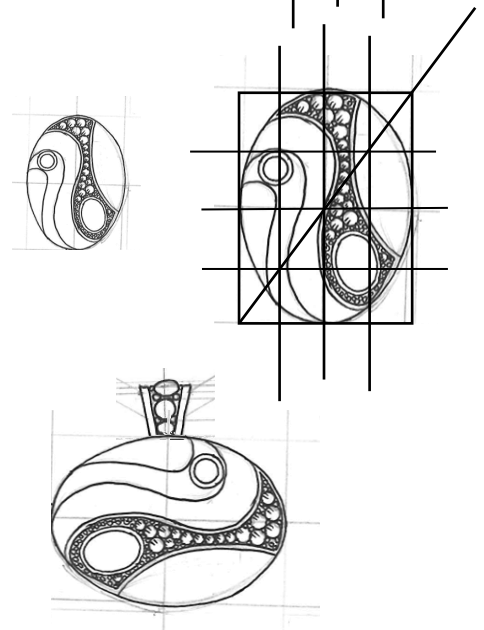
Pinpoint 5 points where the outline of the object hits the horizontal or vertical lines on the smaller box. Transfer these same points to the same location on the larger box. With the HB pencil sketch in the line to join the points. Continue with another 5 points and transfer again until the outline is complete. After the outline is complete, repeat the same steps on any negative spaces. Finish off by repeating the same process on important details.



Step 8

When all of the relevant points have been transferred to the larger box and, gradually the design filled in 5 points at a time, with the HB pencil compare the enlargement to the smaller version and correct any small discrepancies. If they are exactly matching then finish off the piece by tracing the enlargement with the black ink pen.

If this is to be a pendant you can decide in which direction it will hang and add a bail.

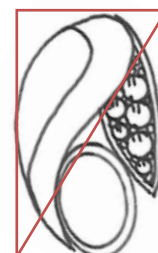




Demonstration of fast Reduction

Step 1

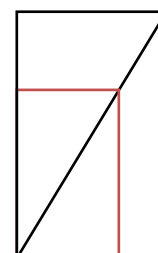
Use the same sketch of the previous earring in actual size. Trace onto a fresh piece of tracing paper, enclose in a box and add the diagonal line from the left side bottom corner to the upper right side corner.



Step 2

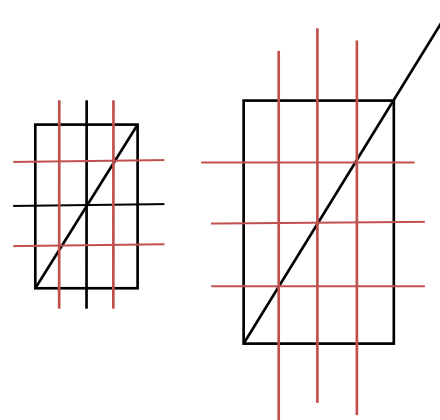
Decide the size of the reduced object. The new horizontal line for the top of the box will run from left to right up to the diagonal line and where the two cross a vertical line must be drawn parallel to the opposite side.

Notice that the new box albeit smaller in size has the exact same length to width ratio as the original. This is because the diagonal line has remained the same.



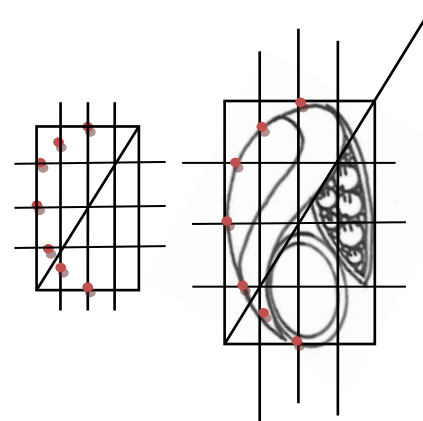
Step 3

By eye divide the two boxes into 16 equal parts in the same way as described in Steps 3 and 4 of the enlargement directions.



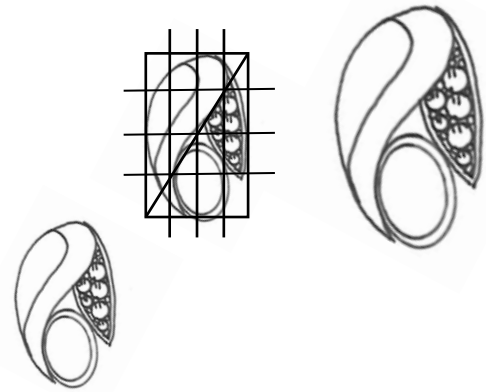
Step 4

Observe the same 5 points marked on the original where the outline of the object hits the horizontal or vertical lines. Transfer these points to the exact same location on the smaller box. With the HB pencil sketch in the line to join the points. Continue with another 5 points and transfer again until the outline is complete. After the outline repeat the same steps on any negative spaces. Finish off by repeating the same process on important details.



Step 5

When all of the relevant points have been transferred to the smaller box and gradually the design filled in 5 points at a time with the HB pencil, then compare the reduction to the original version and correct any small discrepancies. If they are exactly matching to the eye then finish off the piece by tracing the reduction with the black ink pen.



Step 6

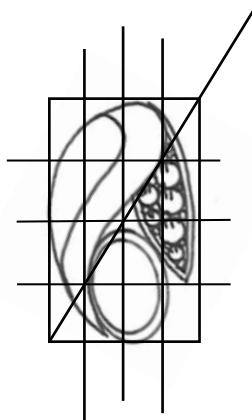
Flip a fresh piece of tracing paper over and trace the earring again this time on the back of the tracing paper. Once traced finish with the black ink on the opposite side of the tracing paper which will give you the mirror image of the earring and a matching pair.



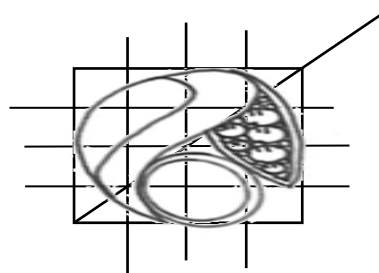
Now the earrings are a good wearable size and will not be too heavy for the ears.

Changing the direction of the Diagonal line to enhance creativity

As observed with the enlarging and reducing exercises the diagonal line plays a very important part in retaining the length-to-width ratio of the original producing an enlarged or reduced version without distortion. Changing the direction of the diagonal line however can give some exciting alternatives and even create additional designs for further variations of a theme and can enhance creativity many times over.



Original



Distorting the diagonal



Exciting New design



Enlarging and Reducing Activity

*** This Exercise should be timed and self-assessed for accuracy ***

- ❖ Take an existing image traced earlier which is larger than the actual size of an earring and reduce it to a wearable size
- ❖ Using the enlarging technique enlarge this earring to a size you would like to create for a matching pendant. (It should not be back to the same size as the first design selected, either bigger or smaller.)
- ❖ Next reduce the original earring to a smaller size as a component part for a link bracelet.
- ❖ Use your tracing technique to produce an example of a link bracelet with this new size.

- ❖ Change the direction of the diagonal line and create an alternative/ different looking design for either the earring or the pendant.

It is important to measure the time taken for each design so as to compare this task to the average designer speed for basic drawing steps, as well as for you notice any improvements as more practice is obtained. There should be a marked improvement in speed and this will continue to motivate further practice.

Knowing how long each type of design takes will later help you to assess pricing and costing for your design work.