

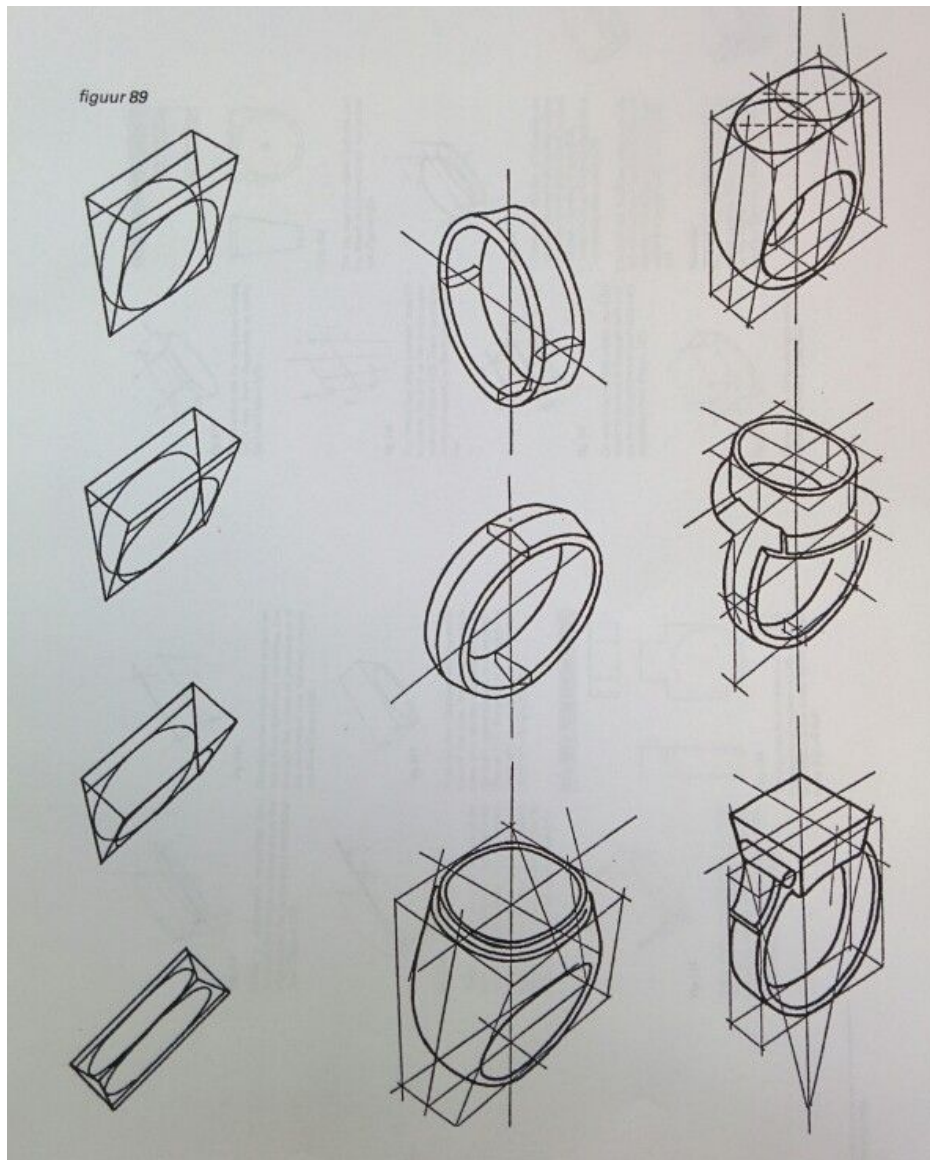
Jewelry

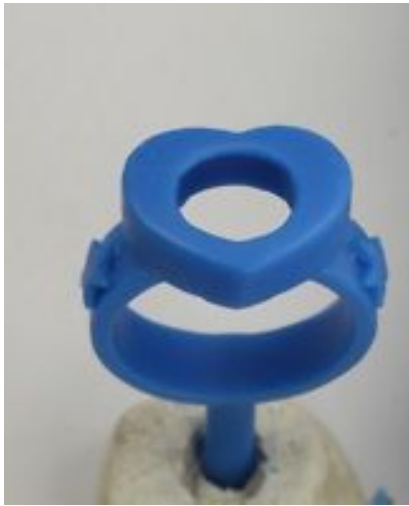
Brass- A metal alloy made of copper and zinc.	Copper- a red-brown metal, the chemical element of atomic number 29.
Nickel Silver- A white alloy of nickel, zinc, and copper.	Gate- The extended passage where the liquid metal enters the sculpture.
Sprue- The passage through which the liquid material is introduced into the mold.	Pouring Cup - The opening to which the metal is poured.
Lost Wax Method- A wax sculpture is invested with a mixture of sand, plaster and water. The wax is then melted out and replaced with bronze.	Ring- a small circular band, typically of precious metal and often set with one or more gemstones, worn on a finger as an ornament or a token of marriage, engagement, or authority.
Pendant- a piece of jewelry that hangs from a chain worn around the neck.	Blue Wax- Wax wire is ideal for the flexible strength your designs require.
Red Wax- Sticky, pliable wax used for sculptural aspects of your jewelry	File Wax- Carving wax used for making sturdy designs.

Rough Draft: Please research and print of 3-5 examples of basic casted jewelry. Glue these with their citations in your sketchbook. On the same page you will be sketching 10 quick sketches of jewelry you may want to produce for this project. Of these sketches, you will pick two that will become a matching set for your final design. You will then complete two technical drawings of your chosen pieces. Examples of these are on page two of this document. If you would like to cast anything in silver, this will be an extra expense of the artist. You will have copper, nickel silver, brass, and bronze to choose from for your final metal types otherwise. Please take one photo of each page of your sketchbook.

Wax Sculpture: After you have completed your technical drawing you will need to make your designs out of wax. To make the correct size of your ring you will use a piece of dowel rod and masking tape to build up a cylinder that is the correct size. You will use the ring sizes tool to make sure it is the correct size for piece of jewelry. You will then put a piece of wax paper around it and start to build. If you are making a pendant please build it on top of a piece of wax paper. You will need a weight in grams of your wax pouring system and wax jewelry. Record this in your sketchbook with the chart on page five and record your wax weight on main list on Mrs. Bishop's desk. Please keep your own record of what number you signed up for. Please take 2 photos of each of your wax models before you invest them.

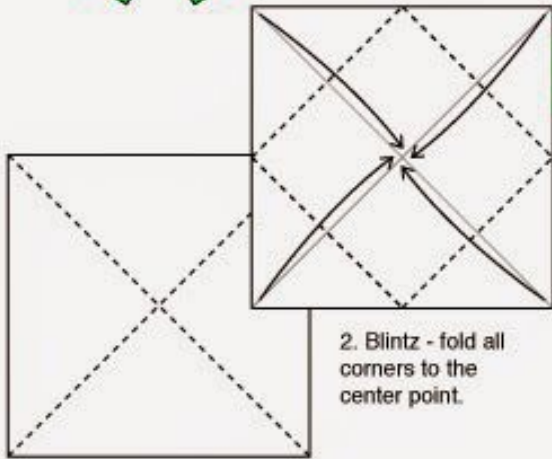
Jewelry Casting: You are read to invest your jewelry! Please make sure you work with two or three other people before mixing up your plaster. This type of plaster is very fine and picks up the details of your jewelry. It is also very expensive so make sure that you are not mixing up too much. The mixture of this is 1 part water and 1 part plaster. You can mix in the small cottage cheese like containers. Mrs. Bishop will burn out the wax for you in a small jewelry kiln and then you will cast together in the centrifugal casting machine. Please make two origami bins and weigh out the metal you need for casting. You will use the scraps from the metal bins in the back of the room. It will take 3-5 days in class to cast everyone jewelry. You will use dremel tools, small files, and the polisher to finish your jewelry. Please take 2 photos of each casting before you clean it up and then two additional photos of your casting after you have cleaned them up.



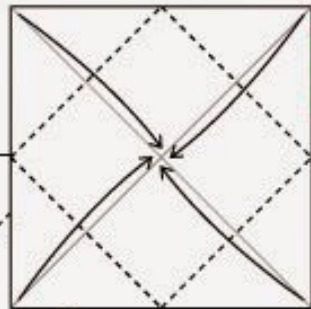




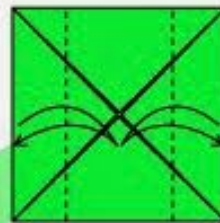
Traditional Japanese
Box of many uses.



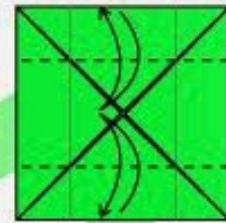
1. Crease diagonals.



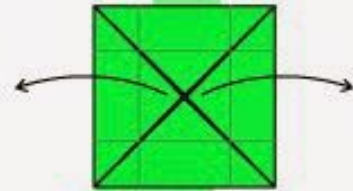
2. Blintz - fold all
corners to the
center point.



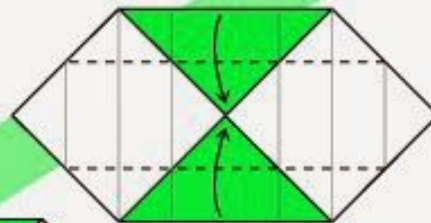
3. Fold edges to the
centre.



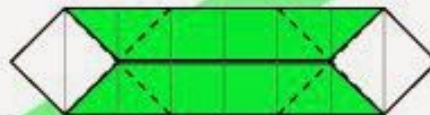
4. Fold other edges
to the centre.



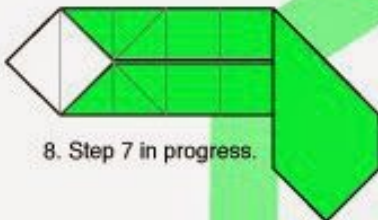
5. Unfold two side points.



6. Fold on existing creases.



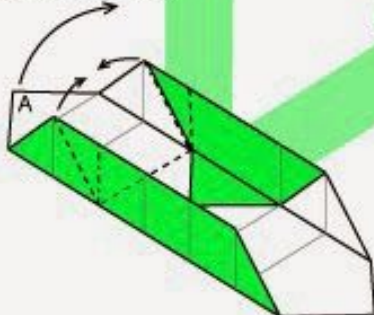
7. Fold and unfold on diagonals.



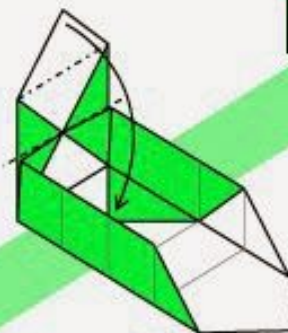
8. Step 7 in progress.



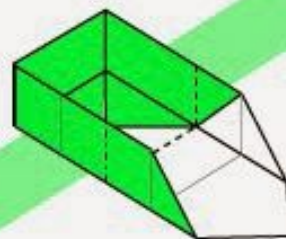
9. Lift sides to 90°.



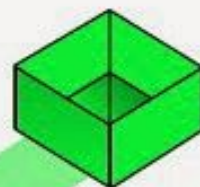
10. Make the side of the box, lift
point A upwards, the existing sides
will naturally collapse to points.



11. Fold the point down into the
box, and press the point to the
centre.



12. Repeat steps 10
and 11 on this side.



Masu!

Transfer this chart to your sketchbook. Leave room for your own conversions.

Weigh your wax in grams to get the total weight. Multiply that by the specific gravity of the metal to get the total grams of metal you will need for your casting. Convert grams to lbs for the final weight for lost wax casting. For Jewelry casting you will need to keep both numbers in grams.

Metal	Melting Point Degrees F	Specific Gravity
Aluminum	1220	2.70
Bronze	1960	8.50
Pewter	500	10.00
Sterling Silver	1640	10.50
Brass	1800	8.50
Nickel Silver	1959	8.90
Copper	1981	8.95

Wax Weight x Specific Gravity = Metal Weight

Jewelry

Name:

Hour:

On Time/Late: /10

Self-Check: Check off each requirement if you have completed it. If you used photos from an outside source, print your MLA citations with your sketchbook pictures. Please put all photos into a doc and attach it to the assignment on classroom. Place your rubric with your finished jewelry in the designated area in the classroom. The instructor will circle the point values earned.

Check if complete

Students: Write, circle, answer questions

Teacher: Circle Points Earned

Rough Draft

Research: Attach 2 Photos of your sketchbook pages

0- no photos, 5- 1 photo, 10- 2 photos

0 - 5 - 10

3-5 Photos of basic lost wax jewelry casting for your inspiration (with citations) on sketchbook page

0: no photos, 5: 1-3 photo, 10: 4-5 photos

0 - 5 - 10

10 Sketches for brainstorming your ideas on sketchbook page

Rate yourself on a scale of 1-10,
1- does not have detail, 10- showed precise detail
1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

0 - 2 - 4 - 6 - 8 - 10

2 Detailed technical drawings on sketchbook page

Rate yourself on a scale of 1-10,
1- does not have detail, 10- showed precise detail
1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

0 - 2 - 4 - 6 - 8 - 10

Wax Model

Research: Attach 4 Photos of your jewelry (front and back of each model)

0- less than 2 photos, 5- 2 photos, 10- 4 photos

0 - 5 - 10

Is your wax model simple, but detailed enough to have a focal point?

Rate yourself on a scale of 1-10,
1- shows no emphasis, 10- has strong emphasis
1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

0 - 2 - 4 - 6 - 8 - 10

	Is the pouring cup and sprue system done correctly? (compare to examples on page 3)	
	Rate yourself on a scale of 1-10, 1- modeled incorrectly, 10- modeled correctly 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	0 - 2 - 4 - 6 - 8 - 10
	Please attach a photo of your wax conversions. Show the number of the casting, the wax weight, the type of the metal, and the weight of the metal. Include the chart of all metal types. This should be a page in your sketchbook.	
	Rate yourself on a scale of 1-10, 1- no photo or incorrect conversions, 10- photo of correct conversions 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	0 - 5
Clean Up & Polishing		
	<i>Research: Attach 2 photos of each piece of jewelry BEFORE you clean it up. (4 Total)</i>	
	0- less than 2 photos, 5- 2 photos, 10- 4 photos	0 - 5 - 10
	<i>Research: Attach 2 photos of each piece of jewelry AFTER you clean it up. (4 Total)</i>	
	0- less than 2 photos, 5- 2 photos, 10- 4 photos	0 - 5 - 10
	Is the pouring cup and the sprue taken off completely?	
	Rate yourself on a scale of 1-10, 1- many areas not cleaned, 10- all areas cleaned 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	0 - 2 - 4 - 6 - 8 - 10
	Is the whole sculpture evenly cleaned? (wire brush)	
	Rate yourself on a scale of 1-10, 1- many areas not cleaned, 10- all areas cleaned 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	0 - 2 - 4 - 6 - 8 - 10
	Is the jewelry completely polished and cleaned?	
	Rate yourself on a scale of 1-10, 1- not complete, 10- complete 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10	0 - 2 - 4 - 6 - 8 - 10
	MLA Citation(s) included on sketchbook pages	0 - 10
Total Points		/150
Notes/Additional Citations:		