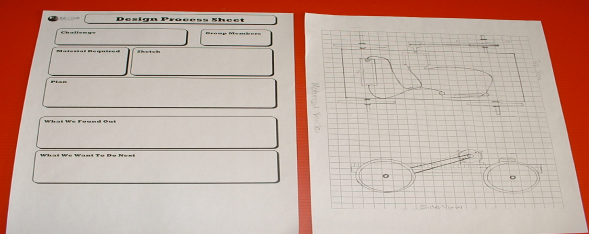
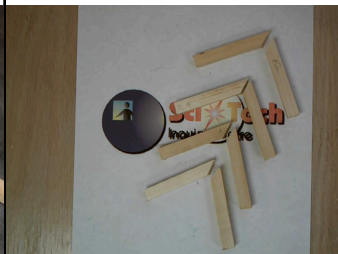
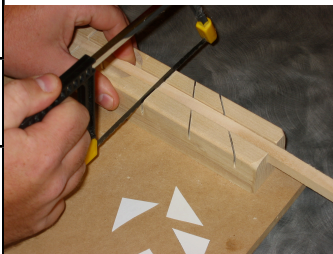

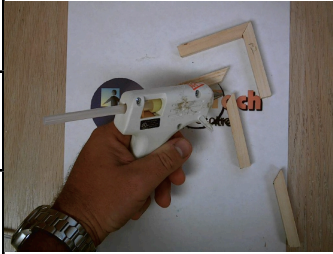

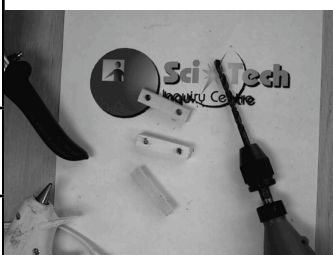








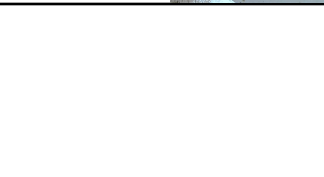
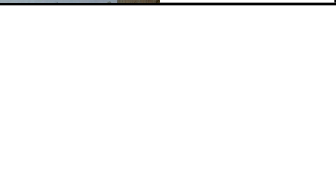
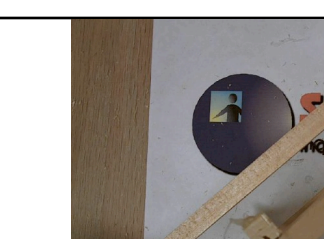







Planning the Claw	Plan
<div>1. Start by determining the materials you have present and make a plan for a Claw.</div> <div>2. Use your graph paper to record your plan and have your teacher sign it.</div> <div>3. Make sure to include the size of all your pieces of wood and what your Claw will look like.</div>	<div></div>
Constructing the Claw	Cutting and Gluing
<div>4. Determine the desired length of the fingers of your claw.</div> <div>5. Using long steady strokes, cut 8 fingers the same size from basswood</div> <div>6. After you have made all your cuts, glue the basswood pieces together using a glue-gun. Join the fingers using a "mitered" corner</div>	<div></div>
<div>Be Careful, glue guns are hot and can burn.</div> <div>7. Determine where you would like to drill your holes and mark the spot with a pencil.</div> <div>8. Place the fingers in a vice and pre-drill your holes for your <i>pin-hinge</i></div>	<div></div>
Constructing the Claw	Claw wrist and fingers
<div>9. Design, measure and pre-drill the wrist of your claw. Make three equal pieces. The size determines how wide your claw will open.</div> <div>10. Using a dowel, connect the wrist of the claw to the mitered fingers.</div> <div>11. Carefully glue the top of the dowel to the top and bottom finger of your claw.</div>	<div></div>

Hydraulic Claw

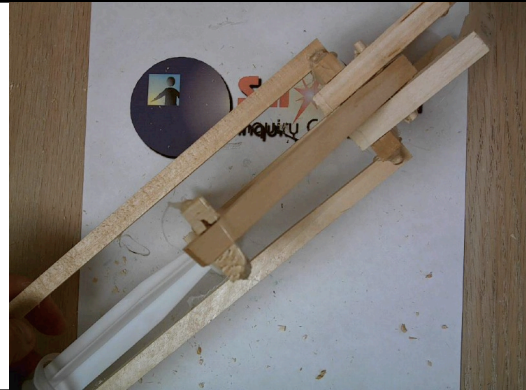
Constructing the Claw	Claw wrist and fingers
13. Connect the arms to your claw by gluing one side to the top and bottom of the fingers and glue a basswood spacer to the other side of the arm.	 
14. Determine where you would like to attach your syringe to the arm. MEASURE CAREFULLY, extend the plunger back and forth until you discover the perfect location of you syringe.	 
15. Using a hot glue gun attach the syringe to the arm of the claw.	 
16. Determine the length of your plunger attachment(part A) and cut to the desired length. Pre-drill holes on both ends of two equal pieces of basswood.	 
17. Measure and cut a 3cm basswood spacer. Glue the spacer between Part A of your plunger attachment	 
18. Determine the length of plunger attachment (part B). Be sure to measure the length of the plunger attachment when the claw is CLOSED. Pre-drill holes on each end, you will need two pieces.	 

22. Using a dowel and glue gun connect the plunger attachment to your claw.	
21. Using a glue gun attach the syringe plunger to the plunger attachment, adjust if necessary.	



Hydraulic Claw

22. Using a dowel and glue gun connect the plunger attachment to your claw.



21. Using a glue gun attach the syringe plunger to the plunger attachment, adjust if necessary.



22. Connect the second syringe to the first syringe with tubing. Test and experiment until the claw opens and closes with ease.

