Mousetrap Car Assembly Instructions

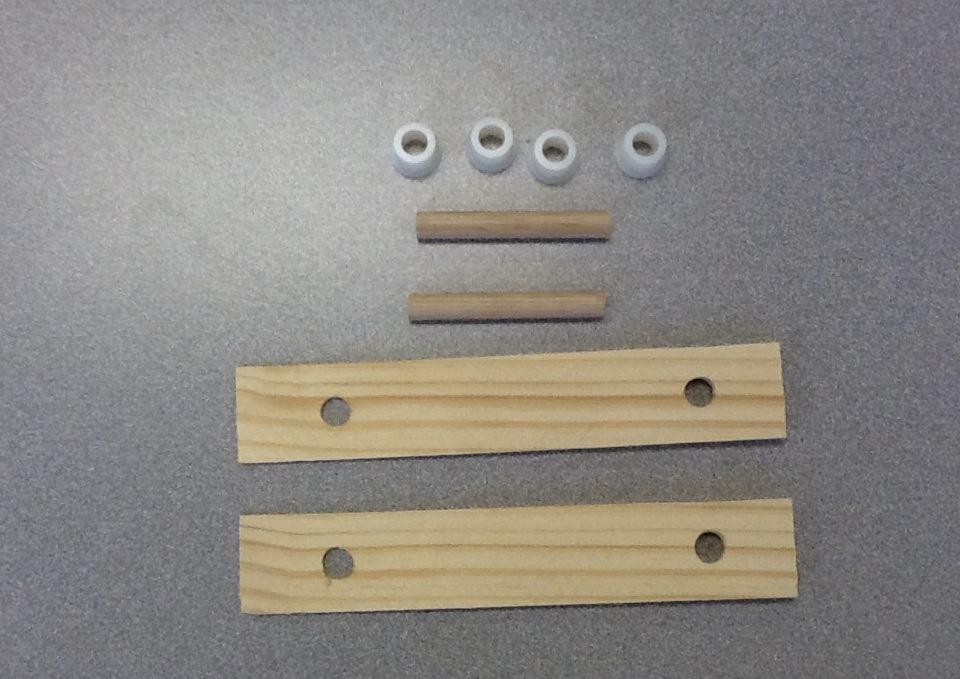
Safety

 Students are required to wear Safety Goggles during the construction portion of the Mousetrap Car Lab

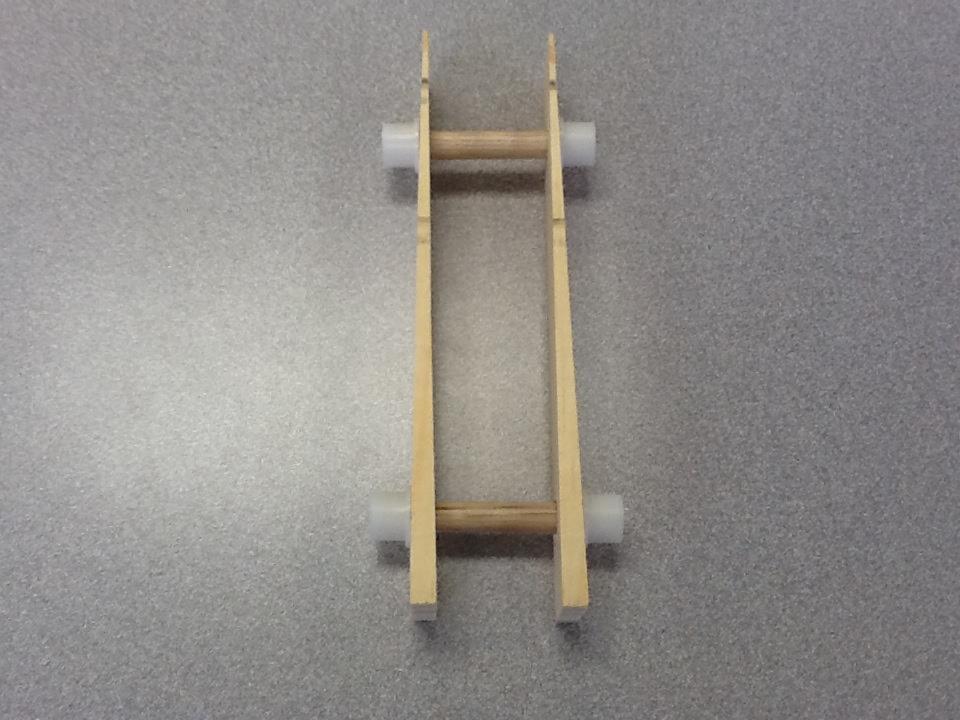
• No Exceptions

Collect Car Frame Materials

- 4 plastic Washers
- 2 Wooden Doll Rods for Axles
- 2 Pre-drilled wooden shims

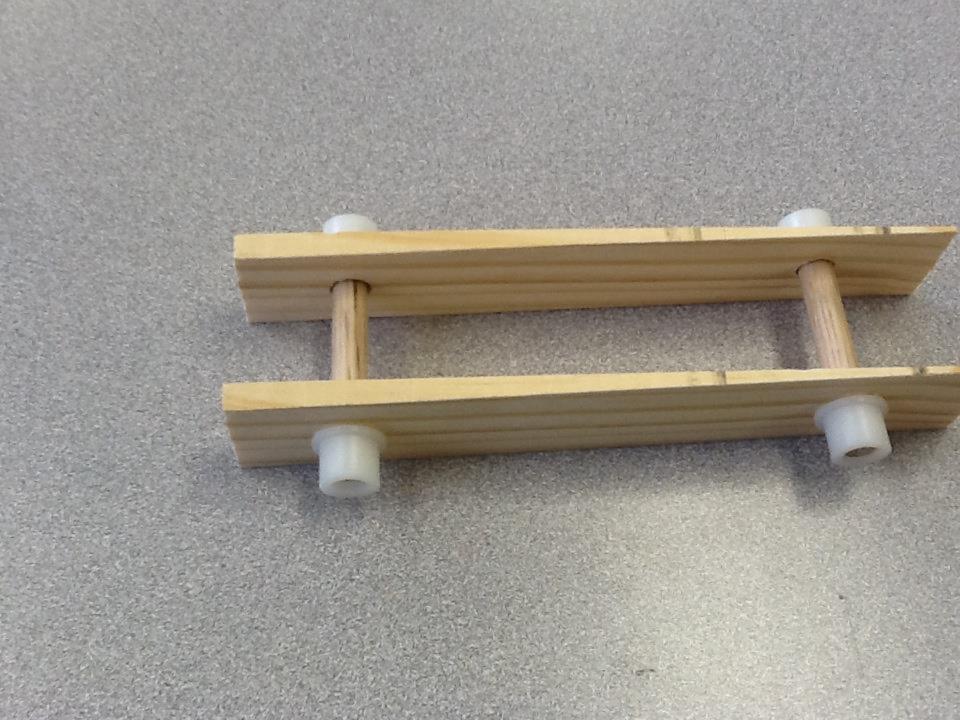


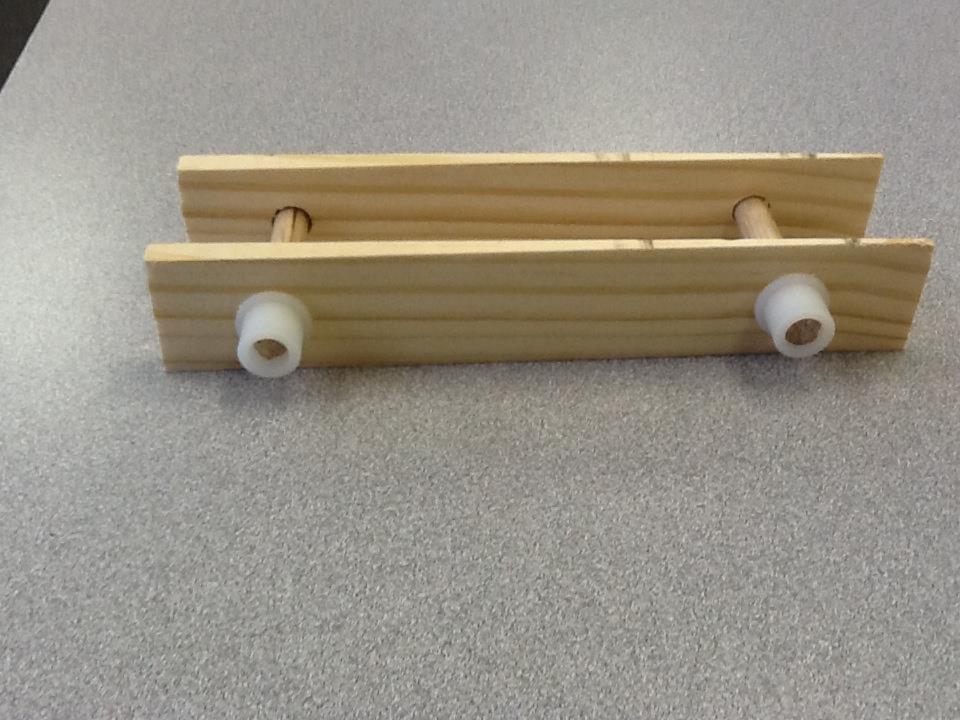
Assemble Car Frame as Shown



Glue Washers

• Use the glue guns to attach the washers to the

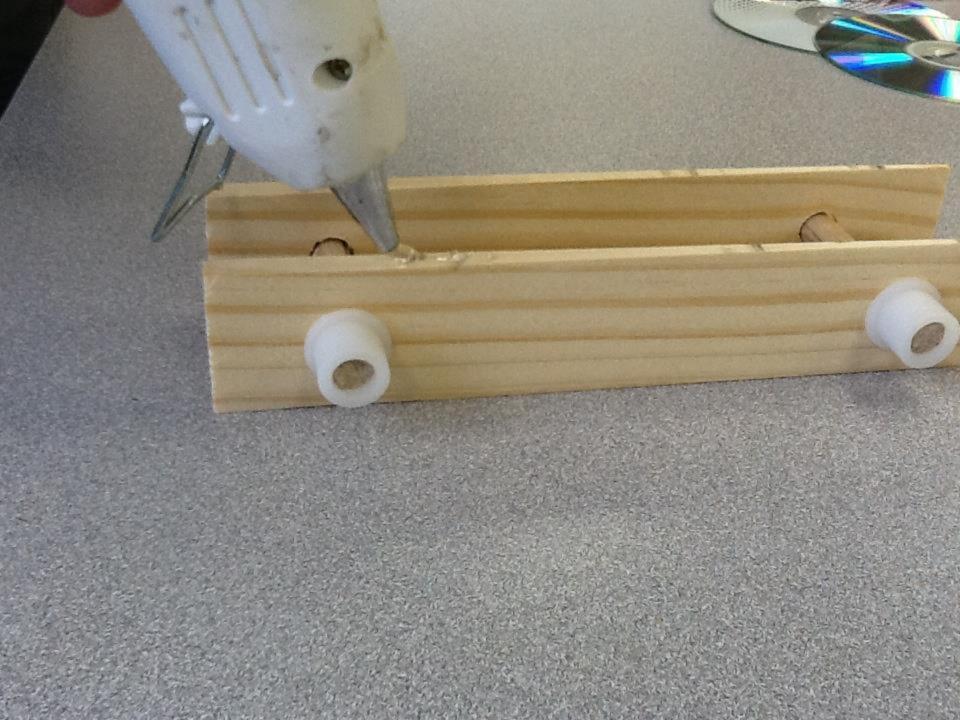


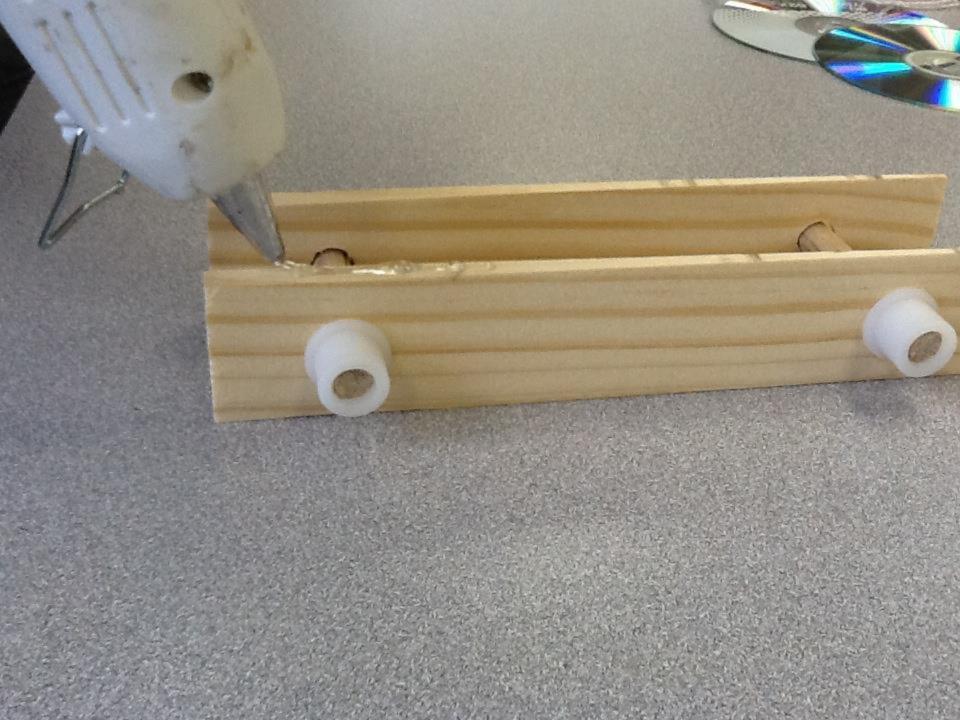


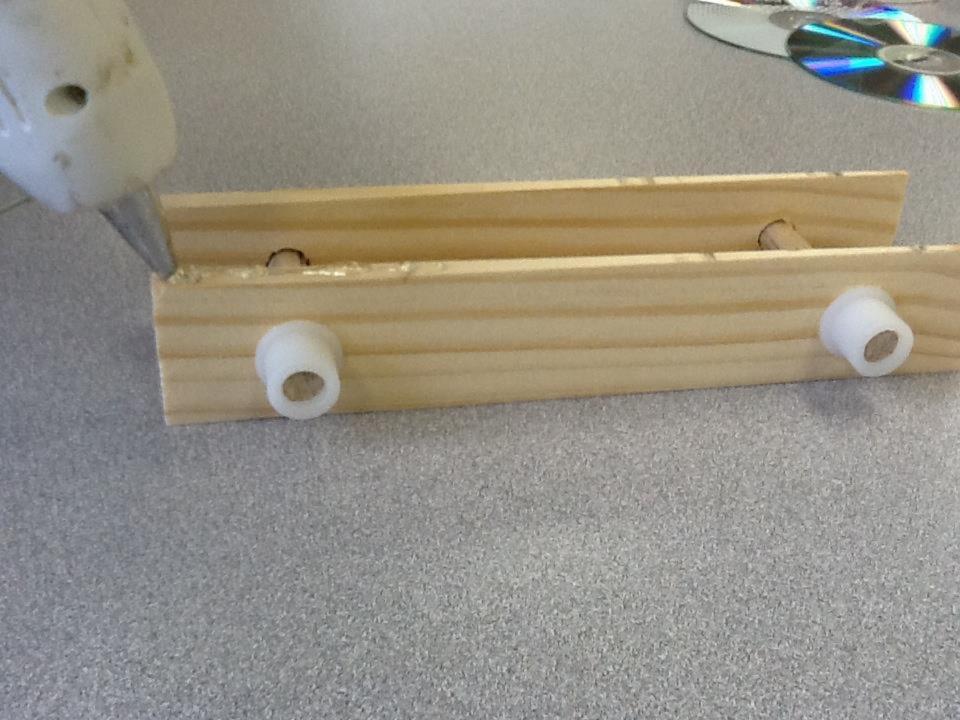
Attaching the MouseTrap

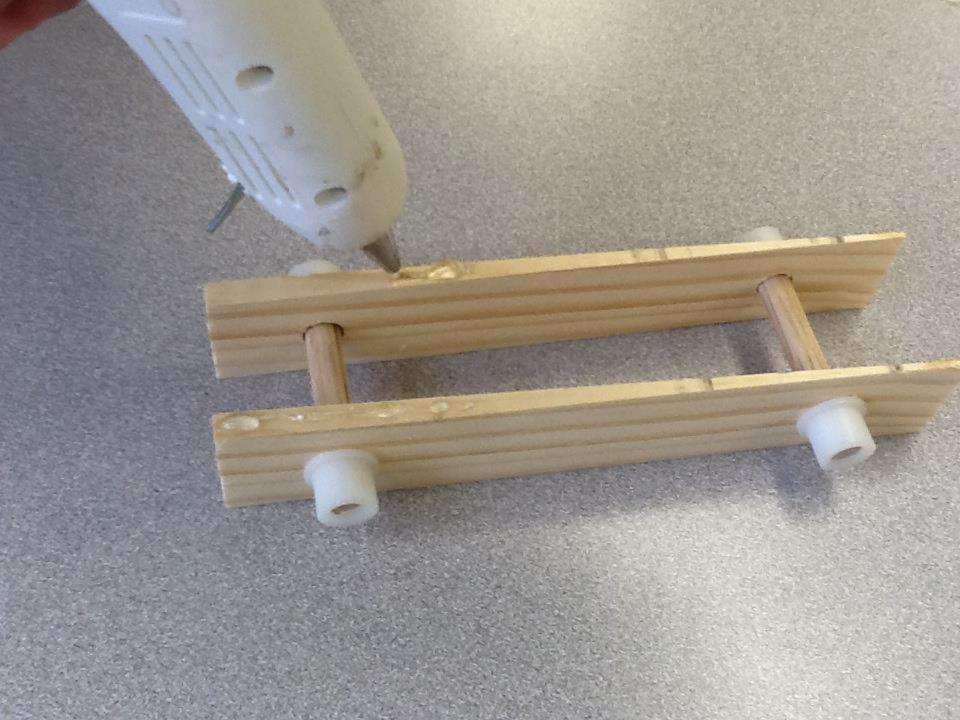
- Use a glue gun to run 2 beads of glue along the top of the wood shims
- Apply glue to approximately half the length of the wood shim

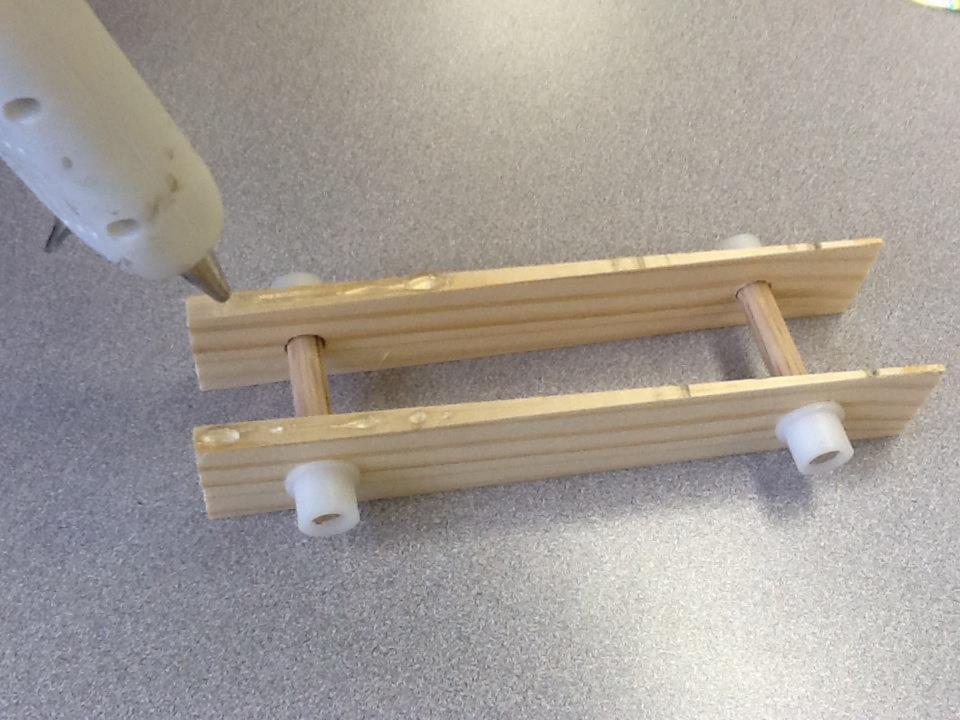








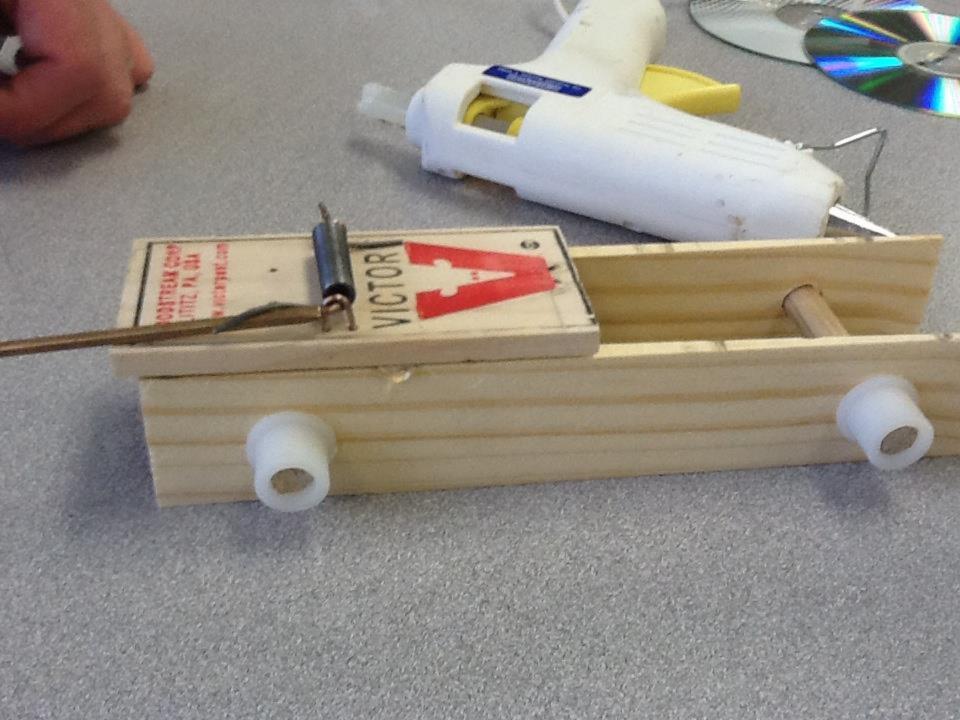


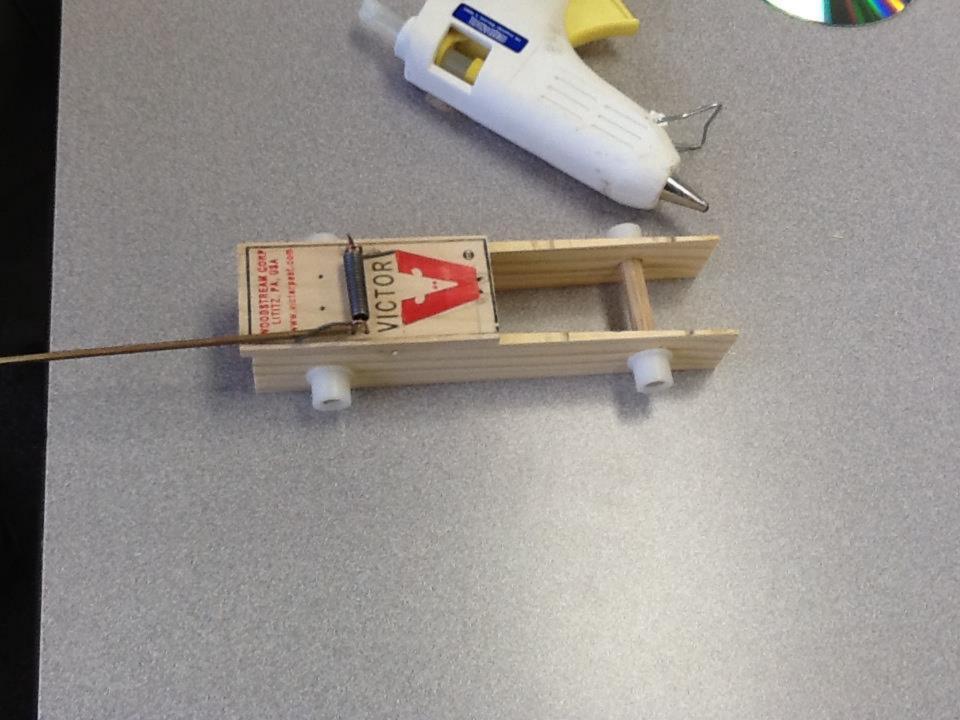


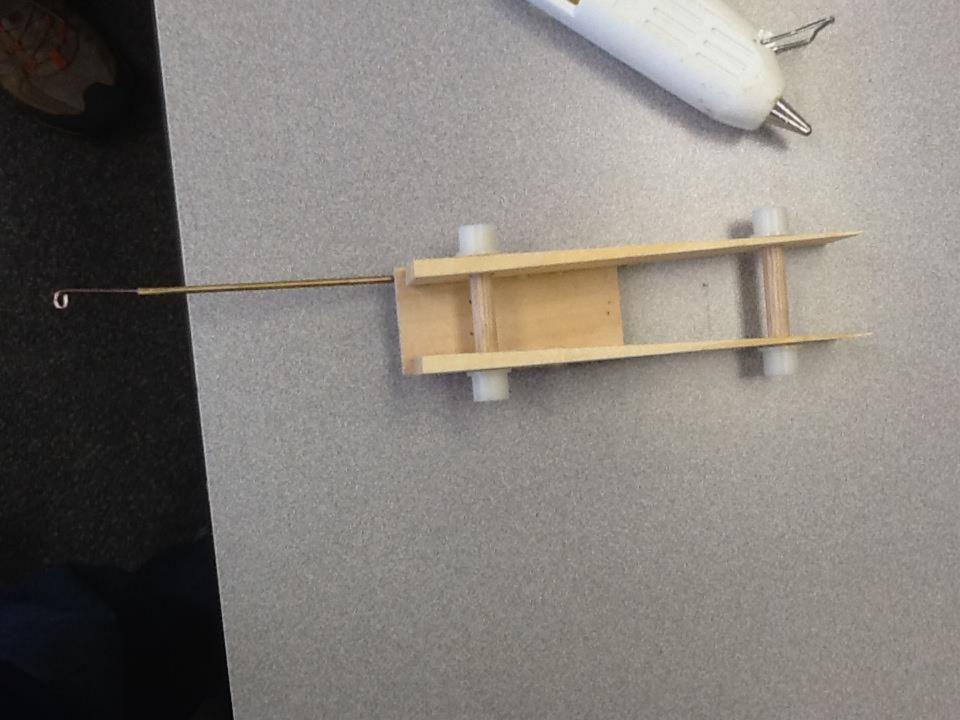
Placing the Mousetrap

 Place the mousetrap on the frame with the "V" of the mousetrap facing towards the front of the car (narrow part of the wood shims)

 Do your best to make sure the frame of the car is the not rubbing against the washers and the wood shims are <u>parallel</u> and <u>straight</u>.

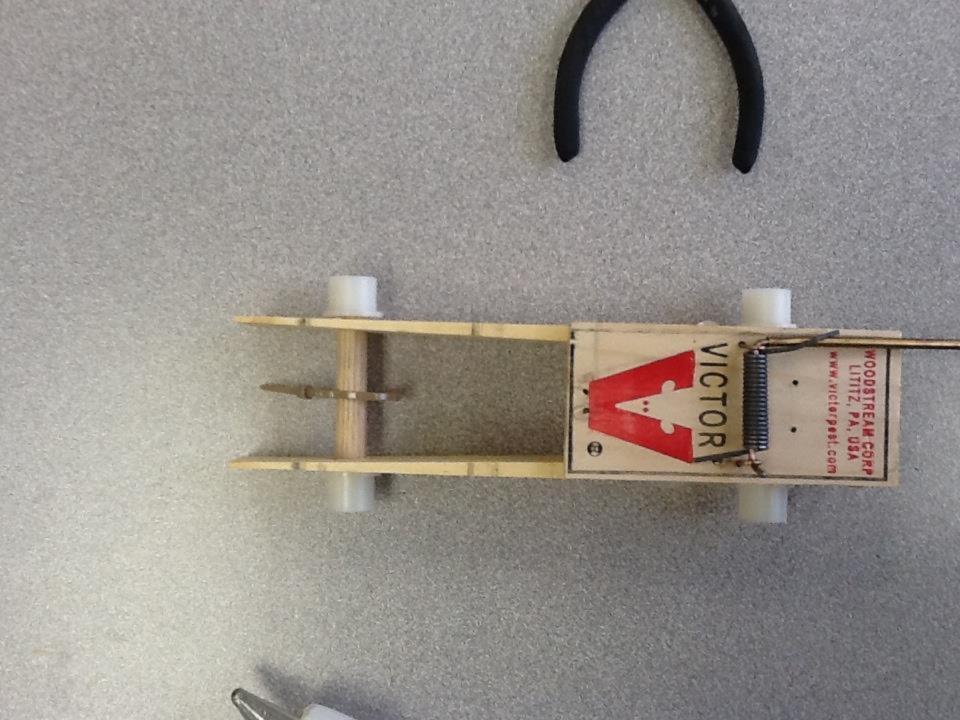






Drive Axle

- Tightly attach a small zip tie to the drive axle of your Mousetrap Car.
- Trim the end of the zip tie so only a small portion is left on the end.

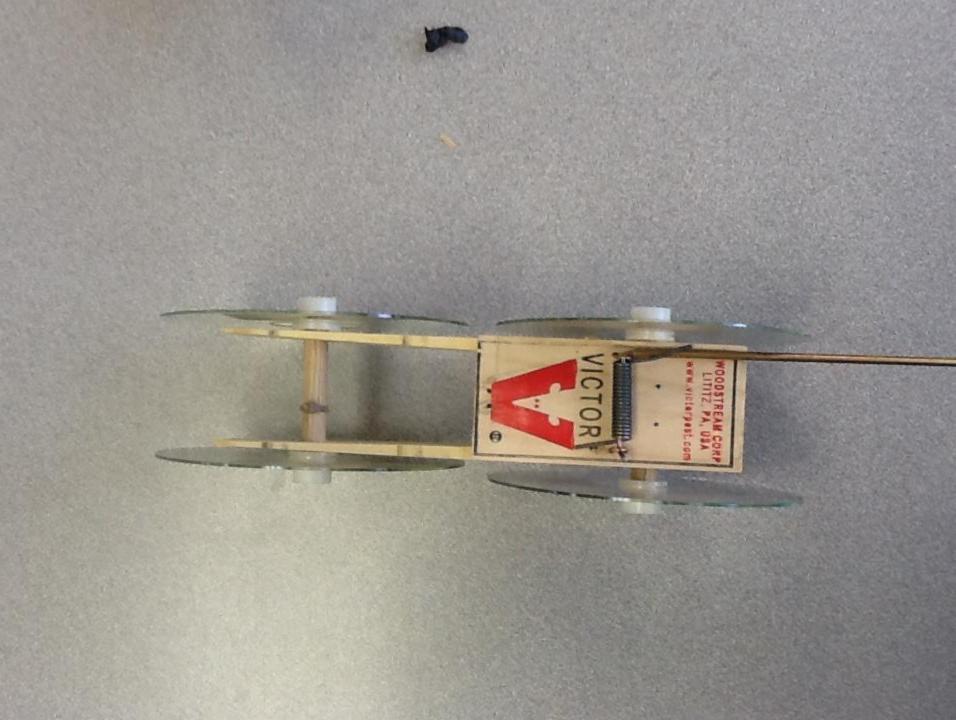




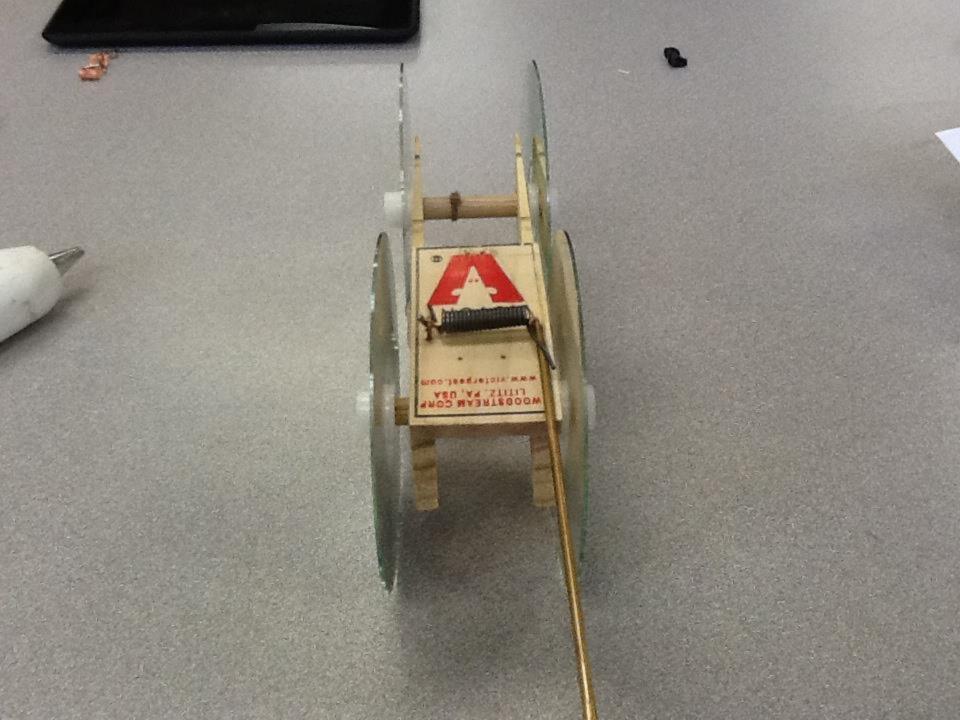
Wheel Installation

• Install the CD's on to the plastic washers.

• You may use tape, rubberbands, or glue to make sure your wheels stay attached.







Lever Installation

- Collect a metal rod and hook for the lever
- Insert the hook into one end of the lever and the lever onto the mousetrap





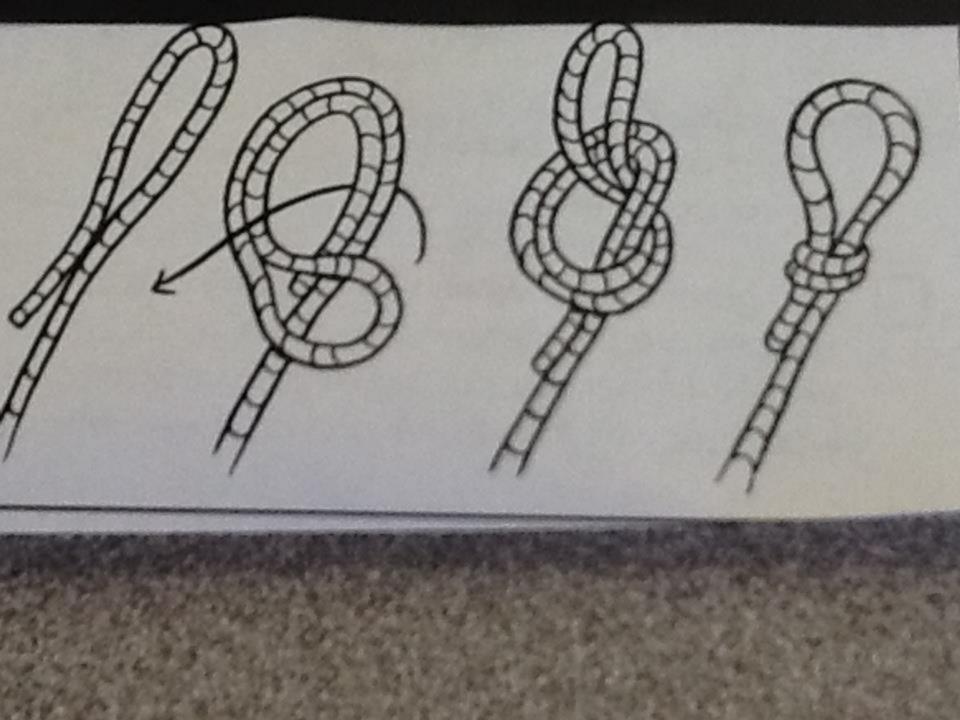
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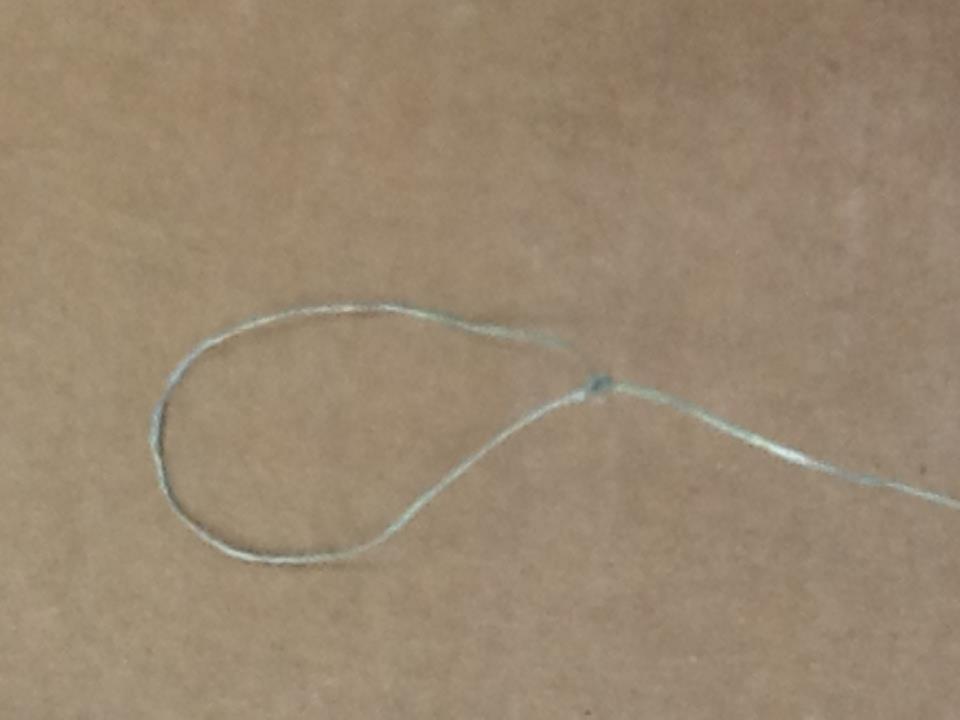
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String

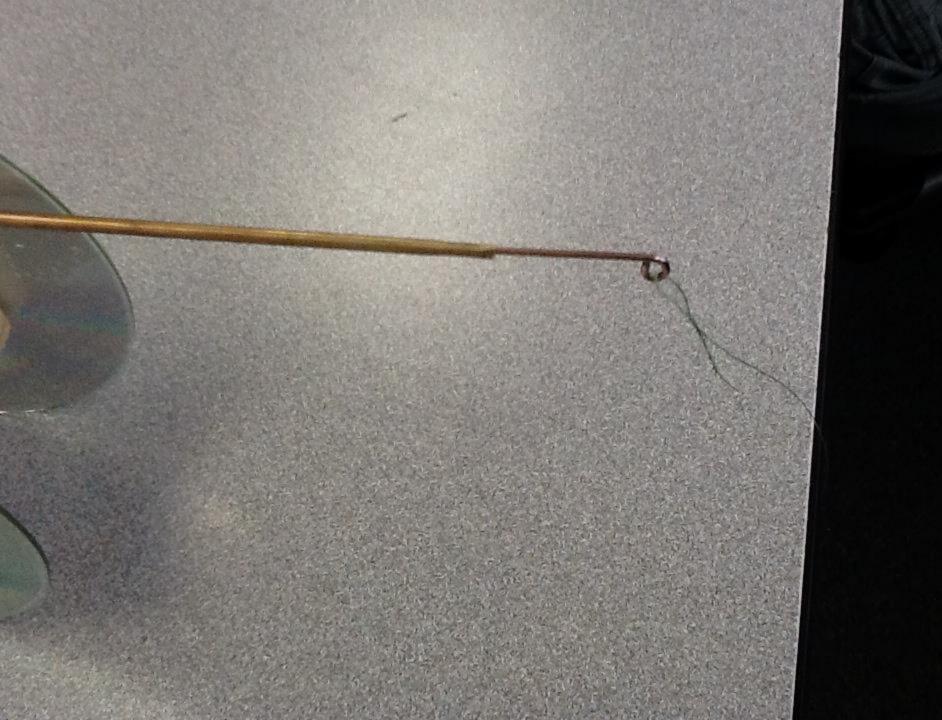
- Gather a length of string that slightly longer the distance between the hook and the zip tie when your car is at rest
- Tie a loop at each end of the string per the picture below

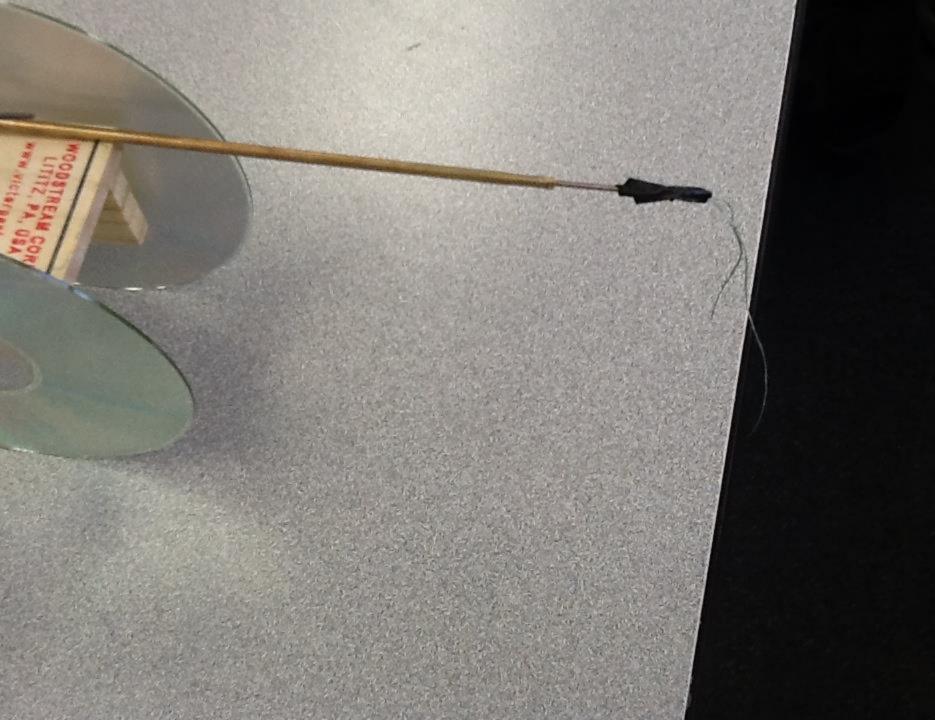




Attaching the String

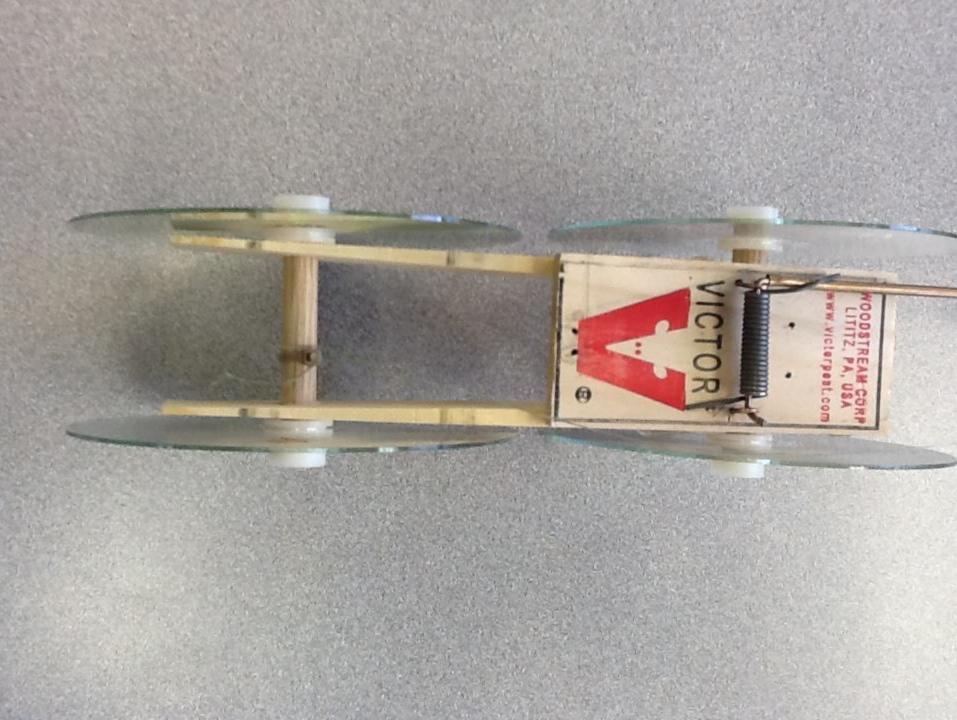
- Attach the string to the hook.
- You may need to use tape to make sure the string does not slip from the hook

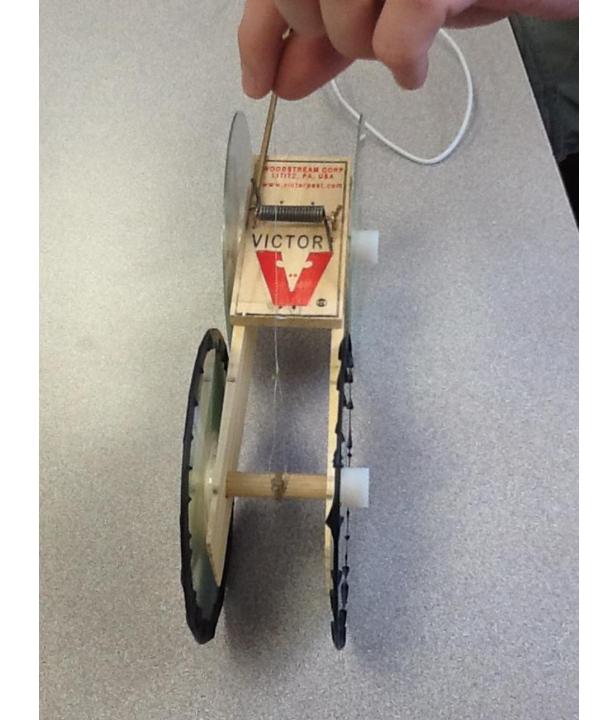




2nd String Loop

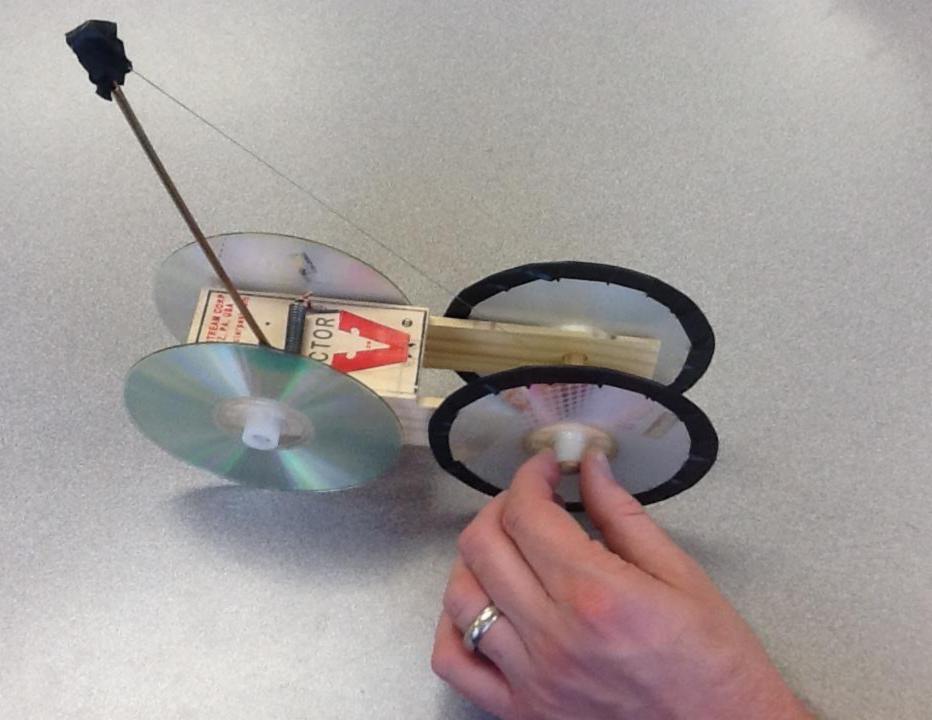
 The second string loop is attached to the zip tie and wound around the axel to provide the energy that drives the Mousetrap Car.





Drive!!!

• Now drive your Car 🙂





The following slides show one way to increase friction to your mousetrap car wheels. This step is not required. Other methods may be researched and used.



