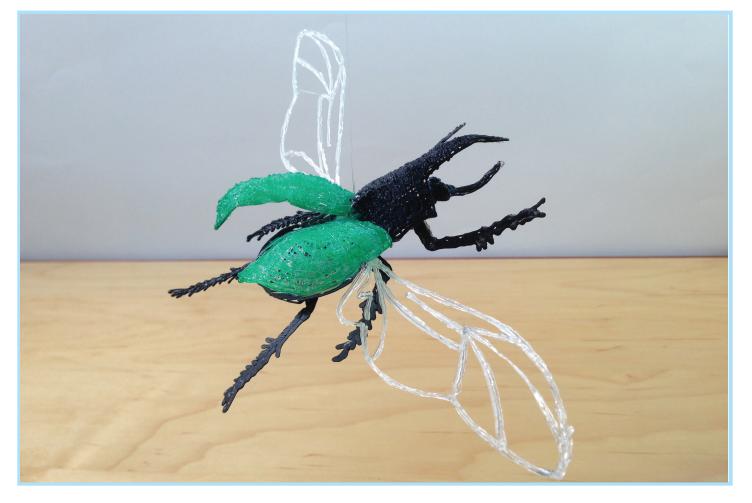


#### Final



In this project we create a Rhinocerous Beetle. This project is great because the final product is life size! The large pieces of the shell look great Doodled and can look very convincing. Take your time on this one and you might even be able to trick someone into believing that it's real!

One of the main techniques used in creating the 3D shapes is using fresh plastic to bend and curve the flat pieces you've made into rounded shapes. This project will use a total of 8 Doodle Strands. PLA was used because it is great for reshaping premade pieces with fresh plastic. Always be careful touching plastic that has just come out of the pen.

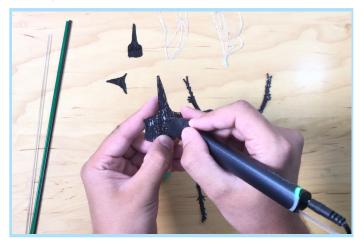
Check out the time lapse video and follow along by pausing it and scrolling through to see every step in action!



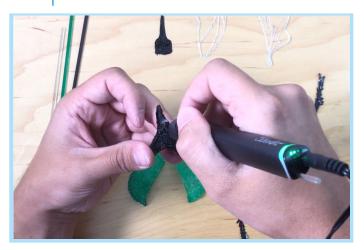
#### Step 1



Print out the stencil, trace the pieces and fill them in. Don't forget to make 2 sets of legs and 2 wings. Step 3



Add some plastic along the middle of the underside of the horn so that you can fold it slightly in half. Step 5

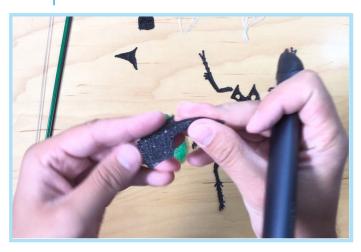


Add the small triangular piece to the underside of the horn.

Step 2



Add plastic to the outer edges of the shell pieces and shape and round them out with your fingers. Step 4



Add more plastic to the unerside and curve the point of the horn down a little bit. Step 6



Add a line to the underside of the head piece and fold it along the line curving the point upwards.



#### Step 7



Attach the head piece to the under side of the large horn so that the points curve towards each other. Step 9



Next, add the smaller mid section of he body to the main body. Step 11



Repeat the process for each of the legs.

#### Step 8



Add fresh plastic around the edges of the bottom of the body and shape it to round it out. Step 10



Attach the legs by putting the ends through the holes on the body and adding plastic to join them.  $Step \ 12$ 



Add the head to the body.





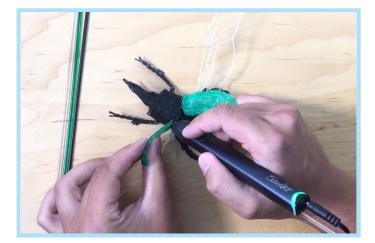
### Step 13

Done!



Attach the wings to the body just behind the head.

## Step 14



Attach the pieces of the shell right over the wings.



Test your skills by setting your beetle up and seeing if you can convince someone it's real!



