



# CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

<b>Name(s)</b>  <b>Claire Boles</b>	<b>Project Number</b>  <b>J1105</b>
<b>Project Title</b>  <b>Decomposing Drinking Straws</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives</b> The objective is to determine what type of straw decomposes the fastest in manure compost</p> <p><b>Methods</b> Three straws each of: wheat, paper, cornstarch, plastic, plastic-less with a bend, pasta. Bucket, manure based compost, thermometer, gram scale. Measure straws in gram then put in manure compost. At weekly intervals, removed, measured, observed straws, and returned to compost for eight weeks.</p> <p><b>Results</b> At the end of 8 weeks, all straws were at different stages of decomposition with the exception of the paper and pasta straws which had completely decomposed. At the end, the three cornstarch straws weighed 2.60 grams. The plastic straws weighed 4.46 grams. The wheat straws weighed a total of 2.41 grams. The plastic-less straws with a bendable top weighed a total of 2.75 grams.</p> <p><b>Conclusions</b> I found that the pasta straw is the best alternative to plastic straws because they decomposed in six weeks.</p>	
<b>Summary Statement</b>  I decomposed six different types of straws in manure based compost to determine what straw has the least negative impact on our landfills.	
<b>Help Received</b>  I designed the project by myself. Katie Boles assisted with editing and Luke Kampmann provided manure based compost and gave additional information on the decomposing process	