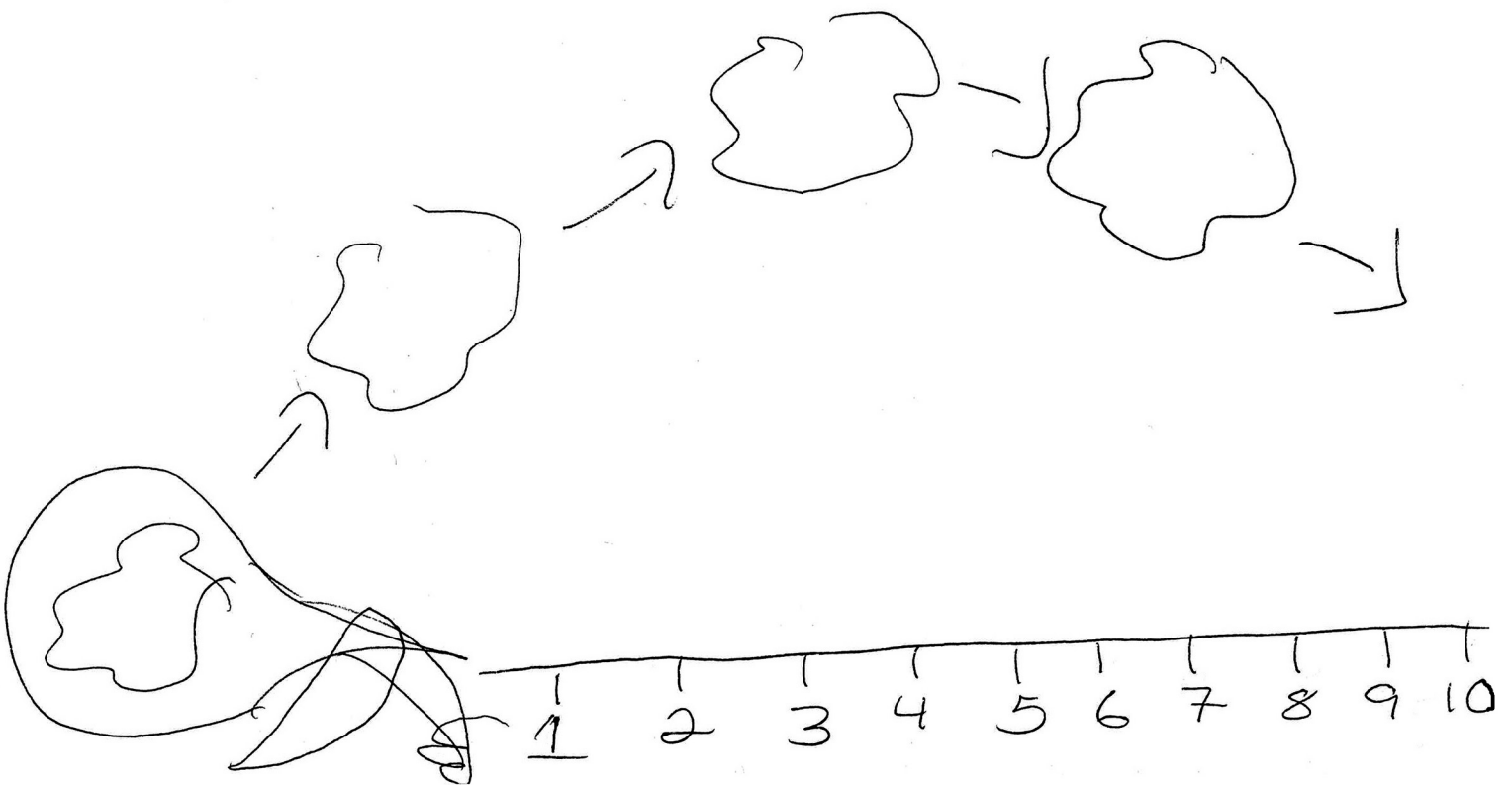
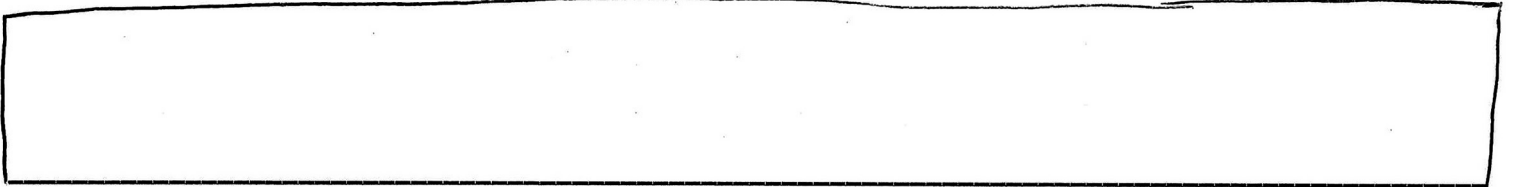


# Cottonball Catapult!





Problem: Using <sup>only</sup> a spoon, cottonball, and a rubber band, how can you make the cottonball go farther?

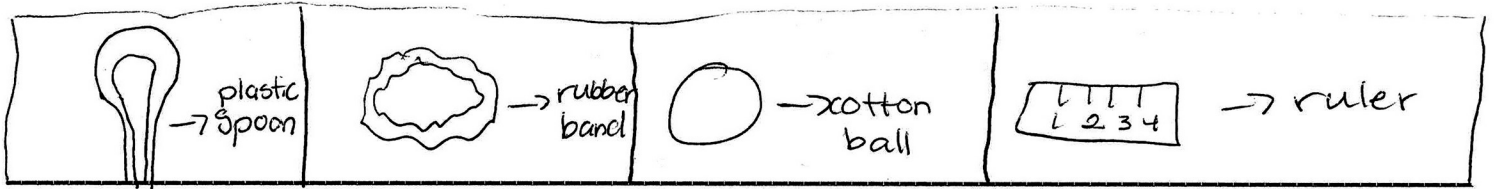
Hypothesis: If you tighten the rubber band on the spoon, <sup>the cottonball farther</sup> ~~it~~ will go faster.

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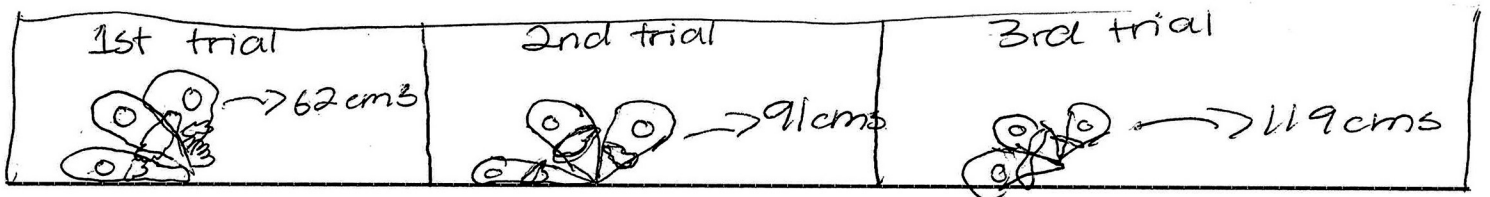
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Procedure: First, we wrapped the rubber band around the spoon. Then we put the cotton ball in the spoon. After that, we pulled the rubber band back and then let go of the rubber band. Then we measured the distance of the cotton ball. The second and third time, we wrapped the rubber band around the spoon twice to make the rubber band tighter.



Data • We tried this three times.

The first time, we only wrapped the rubber

band around the spoon once. The <sup>cotton</sup> ball ~~went~~ <sup>flew</sup>

62 centimeters. On the second trial, the cotton

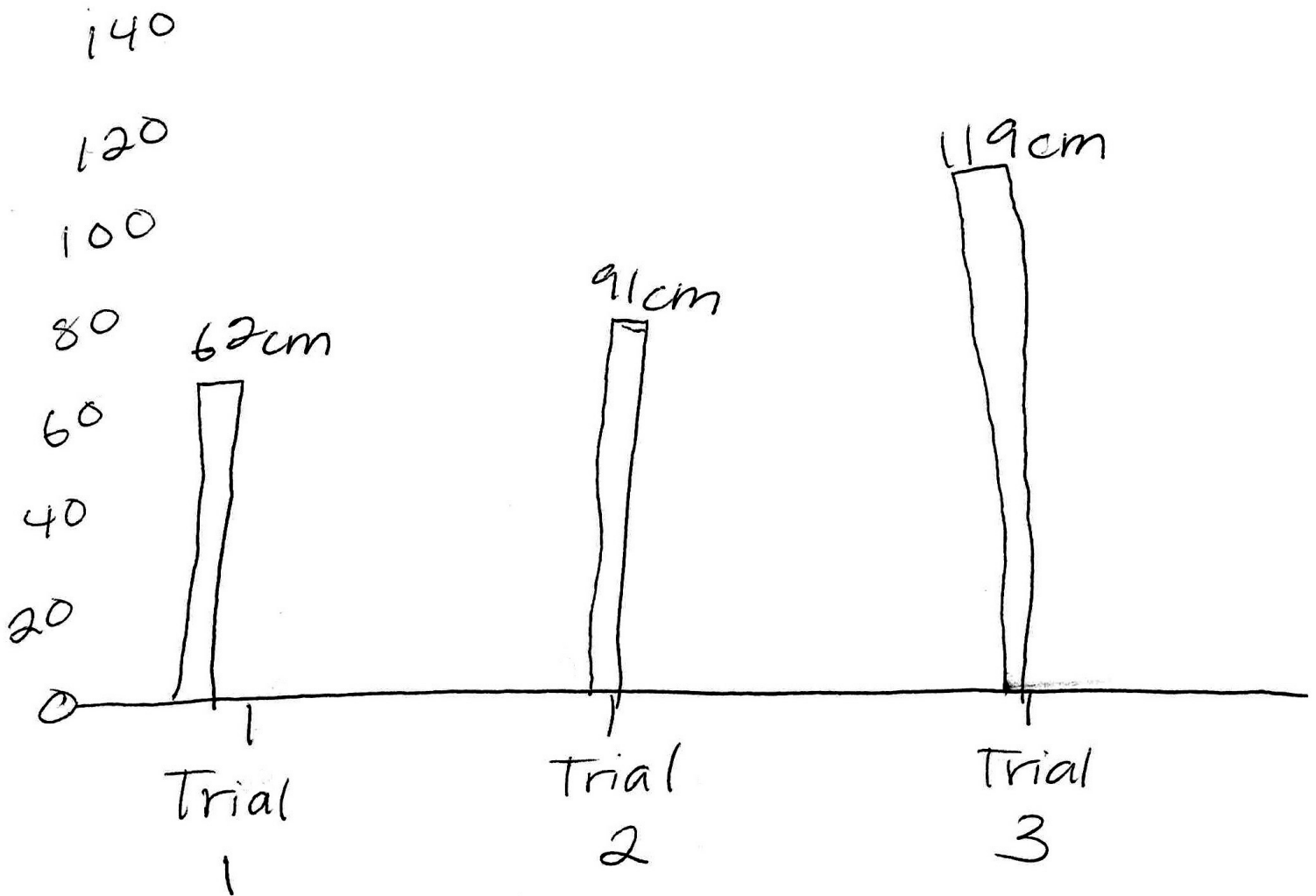
ball ~~went~~ <sup>flew</sup> 91 centimeters. On the third

trial, the cotton ball flew 119 centimeters.

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# Results



$$\begin{array}{r} 119 \\ - 62 \\ \hline 57 \text{ cm} \end{array}$$

Results : We saw the difference  
from wrapping the rubber band once  
and twice around the spoon. The  
cotton ball ~~was~~ went 57 cms farther  
on the third trial than the first trial!

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Future

~~Feature~~

Experiments

- try string
- try wrapping  
three times
- try a golf  
ball

Conclusion: Our Hypothesis is correct.

When you wrap the rubber band around

the spoon twice, it brings more force to the

spoon. This makes the spoon pull back

tighter. From what I read, the rubber

band has tension = a kind of force.

I wonder what would happen if

we wrapped the rubber band three

times?