INTO ORBIT

Designed by: Camren, Kaitlyn, Noah, and Trey
Beginning Sketch

This was our beginning sketch of what we were going to do, but it ended up not being what we thought it would be.
Machine Steps

1. The arrow shoots through the tube and hits the ball.
2. The ball rolls down the inclined plane.
3. Once it gets to the bottom, it hits a stick that is attached to a stack of CDs.
4. The stick is attached to a string that has popsicle sticks; the string lets another ball roll down another inclined plane.
5. After it rolls down, it falls through a tube and hits a lever.
6. When the lever gets hit, it turns on the battery box.
7. The battery box then turns on and pulls a string which is attached to a truck.
8. The truck gets pulled, and when the truck gets close enough, it hits the stopper and makes another ball roll down.
9. The ball has a string on it; the string is attached and lets the car roll down the track.
10. The string lets the car rolls down the track.
11. The ball gets off the track goes into a cup that is on the hubcap.
12. The cup holds the car and rotates and the car falls out and hits a bell.
What We All Used

- Grain bin toy
- Floor trim
- Balls
- Bow and arrow toy
- Cardboard
- Popsicle Sticks
- Electric motor
- Lego Duplos
- Battery box
- K’nex track and car
- Wrapping paper tube
- Cardboard tube
- Paper
- Paint
- Pringles can
- “Boom” stick
- Yarn
- Hubcap
- Cup
- CD’s
- Screw
- Summer toy box
- Legos
- Duck tape
Did we buy anything new?

No, we didn’t buy anything. We used all recycled things or things we already had.

What simple machines are incorporated?

We incorporated two slopes, one lever, and one wheel and axle.
<table>
<thead>
<tr>
<th>Things that didn’t work</th>
<th>reflection</th>
<th>Things that worked</th>
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<tbody>
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<td>We were not going to have the second step be the orbiting CDs, but instead we would’ve had it be where the ball rolls down the inclined plane to hit another ball. We couldn’t figure out how to get it to work.</td>
<td>The steps that you see are the ones that we got to work.</td>
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**Things we thought of and added but had to fix to make it work**

The Lego motor—at first we would’ve had to shut the motor off manually, but then we came up with the idea to have something hit it to shut it off. That is when we thought of the yo-yo. When we added it on, it worked, but then after a while, it started to not work. Therefore, we had to take it off.
Bibliography

https://www.youtube.com/watch?v=RBOqfLVCDv8

https://youtu.be/Gmr7dIpWEJc

https://www.youtube.com/watch?v=d5e0gcvU2J

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A video of how it started
Pictures of the Process