Station One: Power Car Your Name:

How does friction affect your car?						
Added Bonus: How does changing the gear ratio affect your car?						
Be sure to measure your wheels and gears so you know the size you used!						
Trial	Front Wheels	Back Wheels	Driver Gear	Follower Gear	Time	Why do you think your car performed this way?
1						
2						
3						
4						
5						
6						

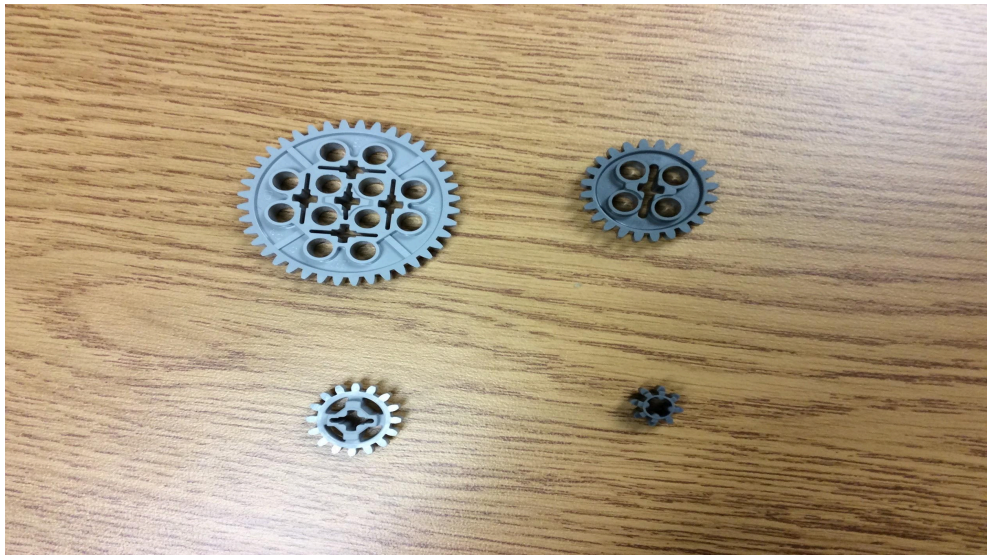
Station Two: Power Car with added Mass

Now add weights to your car. Record your results.

How does Mass affect the performance of your car?					
Trial	How many weights?	Wheel sizes	Gear size	Time	Why do you think your car performed this way?
1					
2					
3					
4					
5					
6					

Station Three: Bottle Racer Launcher Your Name:

How does friction affect your car?				
How does changing the gear ratio affect your car?				
Trial	Front Wheels	Back Wheels	Distance in centimeters	Why do you think your car performed this way?
1				
2				
3				
4				
5				
6				



Gear 1 Gear 2
Gear 3 Gear 4

Wheel 1 Wheel 2 Wheel 3 Wheel 4

Vocabulary: What new words did you learn?

Word	Meaning/Definition

Reflections and Observations: RECORD ALL AND ANY OBSERVATIONS HERE!!
Did you see any patterns? When you created a variable how did that affect your car?
(HEY! What's a variable?)

How does this equation apply to this experiment? Velocity (Speed) = Distance divided by Time. (The equation is V=D/T)