

Electric Car Data 4/27/18  
Credit to Table 6 2<sup>nd</sup> Period

Data	Small Gear	Large Gear
Force measurement – horizontal	.27 N	.17 N
Force measurement – vertical	1.57 N	1.55 N
Speed test – trial 1	3.32 seconds	5.06 seconds
Speed test – trial 2	3.36 seconds	6.36 seconds
Speed test – trial 3	3.8 seconds	4.45 seconds
Speed test - average	3.49 s	5.29 s

**Conclusion**

1. Which gear provides more horizontal force to the motor? Use evidence to support your answer.
2. Why did we measure the force in the vertical direction?
3. Which gear is better for speed? Use evidence to support your answer.