**Grade 7**

**Science**

**Quarterly Study Guide**

**Take some time to review these concepts that we learned in the beginning of the school year til now.**

**Lab Safety –**

* Pages 232 – 233 in textbook. Appendix A
* PPEs
* Safety Equipment in classroom

**Scientific Method –**

* State the Problem
* Gather Information
* Make a Hypothesis
* Experiment
* Record Data
* Form Conclusion

**Motion –**

* Reference points
* Metric System and Metric Conversions
	+ KHDUDCM
* Speed (s= d/t)
	+ Meters per second
* Velocity (v=d/t)
	+ Meters per second plus direction
* Acceleration (A = vf – vi/ t)
	+ Meters per second squared
* Know definitions **AND** math problems **AND** real world applications

**Forces –**

* Definition
* F= ma
* Unit – Newtons
* Free Body Diagrams – (Vectors!)
* Friction
	+ 4 types and examples
* Gravity
	+ Definition
* Momentum
	+ p=mv
	+ kg\*m/s
	+ Law of conservation of momentum
* Newton’s Laws
	+ 1st Law
	+ 2nd Law
	+ 3rd Law
	+ Know definitions AND examples