**Exam Research**

**Answer the following:**

1. **What are waves?**
2. **How are sound and light related to waves?**
3. **What is frequency?**
4. **What is wave length?**
5. **How can wave speed be calculated?**
6. **What is an isotope?**
7. **How are isotopes different than ions?**
8. **What is the mass of a proton?**
9. **What is the charge of an atom if it loses an electron?**
10. **What is the mass of an electron?**
11. **What is Newton’s 2nd law?**
12. **What is the equation that is associated with Newton’s 2nd law?**
13. **If a moving object is accelerating, how can you calculate the force needed or exerted?**