**Enthalpy Lab I**

**Problems:**

1. **How can you measure the temperature change of 3 different metals when you add them to an acid?**
2. **How can you calculate the enthalpies of the three metals?**

**Material: acid (5ml), Zn, Mg, Ca, electronic scale.**

**Data:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Mass** | **SH** | **I.****Temp** | **F. Temp** | **Temp** | **Heat** |
| **Mg** |  | **1.023** |  |  |  |  |
| **Zn** |  | **.39** |  |  |  |  |
| **Ca** |  | **.647**  |  |  |  |  |

**Equation:**

**Heat (of the metals in Joules)=**

**Mass of the metal x change in tmp x Specific Heat of Metal**

**Specific heat of metals (J/g x K):**

**Zn: .39, Mg: 1.023, Ca: .647.**

**Calculations: show your work!**

**Conclusion. From notes.**