**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Partners: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Set Your Nuts on Fire**

**Purpose:**

* To determine the amount of heat energy produced by a nut per gram of burnt nut

**Materials and Method:**

|  |  |
| --- | --- |
| * Tin can
 | * Water
 |
| * Thermometer
 | * Balance
 |
| * Cashew
 | * Walnut/Pecan/Cashew
 |
| * Cork and dissecting pin
 | * Matches
 |
| * Stand
 | * Clamp
 |

**Labeled Sketch:**

**Observations:**

**Calculations:**

**Heat Energy absorbed by the water:**

**Heat Energy given off by the nut:**

**Mass of nut that burned:**

**Heat energy given off per gram of nut burned:**

**Conclusion:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1)** Explain whether it is Energy transfer or transformation that is taking place--defend.

**2)** Where does the energy come from to heat up the water?

**3)** Which nut is better to eat and why? Compare class averages here: