**The Specific Heat Capacity of 3 Different Metals**

**Necessary Info**

* Heat energy transfers from the hotter (higher T) material to the colder (lower T) material
* Energy transfer is assumed to be 100 % efficient

**Purpose**

* To determine the specific heat capacities of 3 metals

**Materials and Methods**

|  |  |
| --- | --- |
| * Hotplate | * Room temp water |
| * Graduated cylinder | * Thermometer |
| * Beaker | * Ring stand |
| * Iron ring | * 3 different metal cylinders |
| * Coffee cup calorimeter | * Balance * Wire gauze |

**Part 1 Labeled Sketch:** Heating up metal to approx. 100.0 oC

**Part 2 Labeled Sketch:** Mixing hot metal with cold water.

**Observations (including other groups’ metal = 3 metals in total)**

**Calculations**

**1)** Heat energy absorbed by the water:

**2)** Heat energy released by the metal: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3)** Specific heat capacity of the metal (sample calculation)

**Conclusion**

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