

Vocabulary: Calorimetry Lab



Vocabulary

- **Calorie** – the amount of energy needed to increase the temperature of 1 gram of water by 1 °C.
 - The symbol for calories is *cal*.
 - One calorie is equal to 4.184 joules.
 - A kilocalorie (or Calorie with a capital “C”) is equal to 1,000 calories.
 - Kilocalories (Calories) are used to express the amount of energy in food.
- **Calorimeter** – a device used to measure the amount of heat that transfers from one substance to second substance (usually water).
 - Calorimeters are used to find a substance’s *specific heat capacity*.
 - Calorimeters typically are well-insulated chambers that contain water. A thermometer extends into the chamber and is used to measure the temperature of the water before and after a second substance of known mass and temperature is added to the chamber.
- **Joule** – a unit used to measure energy.
 - The symbol for a joule is *J*.
- **Specific heat capacity** – the amount of energy needed to change the temperature of a substance by 1 °C.
 - The specific heat of water is 4.184 J/g °C. This means it takes 4.184 J of energy to increase the temperature of 1 g of water by 1 °C.
 - Sometimes a substance’s specific heat capacity is simply referred to as its “specific heat.”