

**PHY 123 Experiment 9 Mechanical Equivalent of Heat WORKSHEET**

Material	Water	Brass cups	Thermometer (Glass)	Stir rod (aluminum)
Mass [ g ]				

Diameter of disk, d: \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

Starting temperature  $T_i$ : \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

Room temperature: \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

Final temperature  $T_f$ : \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

$\Delta T$  : \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

Average force while turning, F: \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

Initial counter value: \_\_\_\_\_

Final counter value: \_\_\_\_\_

N: \_\_\_\_\_

Work done, W: \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

Material	Water	Brass cups	Thermometer (Glass)	Stir rod (aluminum)
Q [ cal ]				

Total Q: \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

W/Q: \_\_\_\_\_ +/- \_\_\_\_\_ [     ]

Is the W/Q value you found above consistent (within error) with the expected value of 4.187J/cal? \_\_\_\_\_