- Seron (Calorimetry	A CONTRACTOR OF THE PARTY OF TH	Date: Regents Chemistry
		NO COLUMN CONTRACTOR OF THE	Regents Chemistry
greater incre	ease in temperature?	per each absorb 2500. joules of en	nergy, which substance will have th
	1. 7. 3		
	The state of the s	V.	
	Specific heat capacity= 4	19 I/c ^o C Specific heat or	apacity= 0.386 J/g°C
	specific fleat capacity— 4	.18 J/g°C Specific heat ca	apacity – 0.380 J/g C
b. Which	substance had the greater	increase in temperature? Explain	using specific heat capacity.
If 45 75 g o	f water changes temperatu	re from 36.0°C to 79.0°C, how mu	ach energy did this require?
If 45.75 g o	f water changes temperatur	re from 36.0°C to 79.0°C, how mu	ach energy did this require?
If 45.75 g or	f water changes temperatur		ach energy did this require?
If 45.75 g or	f water changes temperatur	re from 36.0°C to 79.0°C, how mu	ach energy did this require?
If 45.75 g or	f water changes temperatur		nch energy did this require?
Determine the	he quantity of aluminum the	nat <i>loses</i> 13450. joules to decrease	e its temperature by from 97.8 °C
Determine t	ie in the Langer of min tra es	nat <i>loses</i> 13450. joules to decrease	
Determine t	he quantity of aluminum the	nat <i>loses</i> 13450. joules to decrease	
Determine the 59.8 °C? The	he quantity of aluminum the specific heat capacity of	nat <i>loses</i> 13450. joules to decrease aluminum is 0.900 J/g°C	e its temperature by from 97.8 °C
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Determine the 59.8 °C? The If 26.7 gram.	he quantity of aluminum the specific heat capacity of	nat <i>loses</i> 13450. joules to decrease aluminum is 0.900 J/g°C	e its temperature by from 97.8 °C
Determine the 59.8 °C? The	he quantity of aluminum the specific heat capacity of	nat <i>loses</i> 13450. joules to decrease aluminum is 0.900 J/g°C	e its temperature by from 97.8 °C

Determine the initial temperature of a 16.0 g sample of water at 35.8 °C that absorbed 5675 J of energy?

Name:		Date:Regents Chemistry
Introduction to Calorimetry		ing the specific
6) If 16.7 grams of ethanol cools from heat capacity of the ethanol.	om 100. °C to 82 °C by releasing	g 739 J of energy, determine the specific
7) How many joules of heat are rele	eased when 5.00 g of water cools	s from 75.0 °C to 25.0 °C?
8) When 20 grams of water is cool	ed from 20°C to 10°C, determine	e the number of joules of heat released.
	m 3e PC to 79.0 K. Lever again	att villenus, est regreste territorio (1916)
9) What is the total number of joul H ₂ O from 25.0 °C to 30.0 °C?	les of heat that must be absorbed	to change the temperature of 100. grams
	Digit Blett ei muni	and address of the street and stringers of stringers of the stringers of t
10) How many joules of heat are ne	eded to raise the temperature of	f a 4.52 gram sample of water by 8.5 °C?
Campanio at	85 for country, what is the Lines	

Name: Date: Regents Chemistry 01	1.5
Introduction to Calorimetry Regents Chemistry 1) a. If 50.0 g of water and 50.0 g of copper each absorb 2500. joules of energy, which substance will have the	
greater increase in temperature?	
Q = 2500.7 $m = 50.09$	
0 = 2500.1 $m = 50.0c$ $c = 0.3865$ K/C	
C= 0.386 J/g°C	
Specific heat capacity= 4.18 J/g°C Specific heat capacity= 0.386 J/g°C	
Q=mcDT	
0000) 000000000000000000000000000000000	
$\frac{2500. = 209 \Delta T}{209 209}$ $\frac{2500. = 19.3 \Delta T}{19.3}$	
07- 11 010°C=12.0°C DT= 129.5°C=[130.°C]	
b. Which substance had the greater increase in temperature? Explain using specific heat capacity. The copper copper has a lower specific heat than	
water therefore it takes more energy to heat up I g	
water that I a of copper. 2) If 45.75 g of water changes temperature from 30.0°C to 79.0°C, how much energy did this require?	
M = 45.759	
C = 4.18J19 $Q = 1823J$	
Determine the quantity of aluminum that loses 13450, joules to decrease its temperature by from 97.8 °C to	
59.8 °C? The specific heat capacity of aluminum is 0.900 J/g°C Q= MCDT 134505 13450= 50(0.000) 35(0.000)	
m'-3	
$C = 0.400 \text{ J/g}^{\circ} C$ $13450 = m342$	
1 If 26.7 grams of water at 87.0 °C releases 1585 J of energy, what is the final temperature?	
M-IKAKT G=MCDI	
m=26.79 1585=(26.7)(418)/21 will be	
C= 4.185/g°C 1585= 111.4000 DT 10000 throng	
DT= ? DT= 14.2°C 87.0-14.2= 172.8°C	
Determine the initial temperature of a 16.0 g sample of water at 35.8 °C that absorbed 5675 J of energy?	7
Q=56757 Q=NON 18/17 Real was	
m=16.00 the Initial temp	
DT = 7	9
35.8 -84.9= [-49.1	(

Name:	Date:
Introduction to Calorimetry	Regents Chemistry
6) If 16.7 grams of ethanol cools from 100. heat capacity of the ethanol.	°C to 82 °C by releasing 739 J of energy, determine the specific
9=739J	$q = mc \Delta T$
7=16.79	739=(16.7)(c)(18)
5 3	739 = 300.6 C 300.6 300.6 [2 5 71.00]
J-88=18°C	300,6 300,6
7) How many joules of host are released at	C= 2.467/00 = 000019 CI
9 = ?	en 5.00 g of water cools from 75.0 °C to 25.0 °C?
	9=mcDT 9= (5.00g)(4.185/g°C)(50.0°C)
m=5.00g C=4.18J1g?	9=11045 7
27 = 5 0.0°C	1-[10-13]
(75:0-25:0)	
$\frac{8}{3}$ when 20 grams of water is cooled from 2 $\frac{2}{3}$	20°C to 10°C, determine the number of joules of heat released.
M=50a	8=100XH.18X10)
C= 4,18J1g°C	9-12-21
D-00	9=[836]=800J
20-10=10	
9) What is the total number of joules of heat H ₂ O from 25.0 °C to 30.0 °C?	that must be absorbed to change the temperature of 100. grams of
9 = 3	9=mcDT
m = 100.	9= (100-)(4.18)(5.6)
C= 4.18218,C	9=12000 TI
DT=5.0°C	2010
	ise the temperature of a 4.52 gram sample of water by 8.5 °C?
d= 5	2= mcDT
n=4.529 c= 4.18019°C	9= (4.529)(4.18 56°C)(8.58
C= 4.18079°C	9=11.6
DT = 8.5°C	9=160.5956
	9=(160 T1