

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	Your name		Date												
2	Partner's name														
3															
4	Phys 1101/1120 - Richmond campus			DISCLAIMER: These example data are purposefully											
5	Expt. 11: Animals			inaccurate. You may test your spreadsheet equations											
6				for correctness using these values, but your real											
7				experimental values will be very different.											
8															
9	DATA:			CALCULATIONS:											
10															
11	Specific heat capacities:			Ambient temperature:				Energy per gram in peanuts:							
12	c_steel (J/g°C)			Ta (°C)				26.33333 kJ/g							
13	c_water (J/g°C)			23											
14												Daily Energy		Mass of peanuts	
15	Animal	mcan (g)	mcan+H2O (g)	dcan (cm)	hcan (cm)	ΔT/Δt (°C/s)	R (J/s)	A/m (cm²/g)	K	Loss (kJ)	per day (g)	% body mass			
16	1	25	200	9	6	-0.054	40.1679	0.848230016	0.015785	3470.50656	131.7913884	65.89569			
17	2	45	350	10	7	-0.04	51.8828	0.628318531	0.015728	4482.67392	170.2281235	48.63661			
18	3	55	450	11	8	-0.039	65.45487	0.614355897	0.015784	5655.300768	214.758257	47.72406			
19	4	65	550	12	9	-0.039	80.32401	0.616894557	0.015783	6939.994464	263.5440936	47.91711			
20	2, wind	45	350	10	7	-0.08	103.7656	0.628318531	0.031457	8965.34784	340.4562471	97.27321			
21	2, dry fur, no wind	45	350	10	7	-0.026	33.72382	0.628318531	0.010223	2913.738048	110.6482803	31.61379			
22	2, wet fur, no wind	45	350	10	7	-0.066	85.60662	0.628318531	0.025952	7396.411968	280.8764038	80.2504			
23	2, dry fur, with wind	45	350	10	7	-0.049	63.55643	0.628318531	0.019267	5491.275552	208.5294513	59.57984			
24	2, wet fur, with wind	45	350	10	7	-0.1	129.707	0.628318531	0.039321	11206.6848	425.5703089	121.5915			
25	2, bare in water	45	350	10	7	-0.2	259.414	0.628318531	0.078642	22413.3696	851.1406177	243.183			
26	2, with fat, in water	45	350	10	7	-0.25	324.2675	0.628318531	0.098302	28016.712	1063.925772	303.9788			