

	A	B	C	D	E	F	G	H	I	J	K	L
1	Your name		Date									
2	Partner's name											
3												
4	Phys 1101/1120 - Surrey campus			DISCLAIMER: These example data are purposefully								
5	Expt. 9: 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:			Energy per gram in peanuts:								
12	c_steel (J/g°C)	0.452						26.3333	kJ/g			
13	c_water (J/g°C)	4.186										
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)	Loss (kJ)	per day (g)	% body mass	
16	1	25	200	9	6	-0.054	40.1679	0.848230016	3470.50656	131.7913884	65.89569418	
17	2	45	350	10	7	-0.04	51.8828	0.628318531	4482.67392	170.2281235	48.63660673	
18	3	55	450	11	8	-0.039	65.4549	0.614355897	5655.300768	214.758257	47.72405711	
19	4	65	550	12	9	-0.039	80.324	0.616894557	6939.994464	263.5440936	47.91710792	
20	2, wind	45	350	10	7	-0.08	103.766	0.628318531	8965.34784	340.4562471	97.27321345	
21	2, dry fur, no wind	45	350	10	7	-0.026	33.7238	0.628318531	2913.738048	110.6482803	31.61379437	
22	2, wet fur, no wind	45	350	10	7	-0.066	85.6066	0.628318531	7396.411968	280.8764038	80.2504011	
23	2, dry fur, with wind	45	350	10	7	-0.049	63.5564	0.628318531	5491.275552	208.5294513	59.57984324	
24	2, wet fur, with wind	45	350	10	7	-0.1	129.707	0.628318531	11206.6848	425.5703089	121.5915168	
25	2, bare in water	45	350	10	7	-0.2	259.414	0.628318531	22413.3696	851.1406177	243.1830336	
26	2, with fat, in water	45	350	10	7	-0.25	324.268	0.628318531	28016.712	1063.925772	303.978792	