

Wet Bulb Hygrometer

Materials:

Thermometers (2)
Cotton shoelace or string
Small beaker
Water
Tape
Index Card

Procedure:

Step 1

Fold an index card into thirds to make a table.

Step 2

Loosely tape two thermometers to the card / table.

Step 3

Frey the end of the shoelace or string and loosely wrap it around the bulb of one thermometer.

Step 4

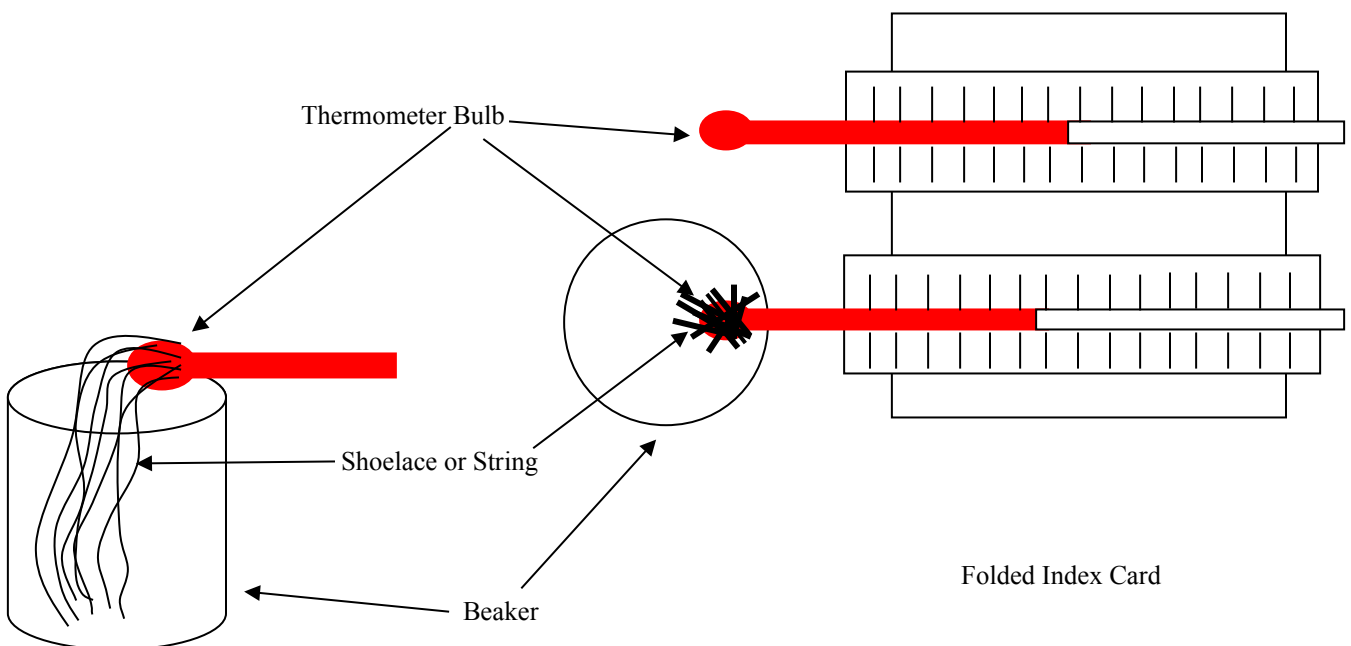
Fill the beaker with water and place it next to the thermometers.

Step 5

Trim the excess shoelace or string off so that it is just long enough to dip most of the way into the water filled beaker.

Step 6

Using the included table, calculate the relative humidity.



Temperature °C	Wet Bulb reads °C lower than Dry Bulb															
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	
2	84	68	52	37	22	8										
4	85	70	56	42	29	26	3									
6	86	73	60	47	34	22	11									
8	87	75	63	51	39	28	18	7								
10	88	76	65	54	44	33	23	14	4							
12	89	78	67	57	47	38	29	20	11	3						
14	89	79	69	60	51	42	33	25	17	9						
16	90	80	71	62	54	45	37	29	22	14						
18	91	81	73	64	56	48	41	33	26	19	6					
20	91	82	74	66	58	51	44	37	30	24	11					
22	91	83	75	68	60	53	46	40	34	27	16	5				
24	92	84	76	69	62	55	49	43	37	31	20	9				
26	92	85	77	70	64	57	51	45	39	34	23	14	4			
28	92	85	78	72	65	59	53	47	42	37	26	17	8			
30	93	86	79	73	67	61	55	49	44	39	29	20	12	4		
32	93	86	80	74	68	62	56	51	46	41	32	23	15	8	1	
34	93	87	81	75	69	63	58	53	48	43	34	26	18	11	5	
36	93	87	81	75	70	64	59	54	50	45	36	28	21	14	8	
38	94	88	82	76	71	65	60	56	51	47	38	31	23	17	11	
40	94	88	82	77	72	66	62	57	52	48	40	33	26	19	13	
42	94	88	83	77	72	67	63	58	54	50	42	34	28	21	16	
44	94	89	82	78	73	68	64	59	55	51	43	36	29	23	18	