

# STUDENT SHEET 7d

## Daily sea ice data and questions

Date:01/03/2009

Location:81°49 ' 32"N129°58 '21 ''W

Temperature (degrees C): -26  
(not including wind chill)

Note: All measurements are  
made in centimetres (cm)

	Position 1	2	3	4	5
Snow depth	18	20	20	27	37
Ice thickness	520				
	Position 6	7	8	9	10
Snow depth	17	10	6	6	19
Ice thickness	400				
	Position 11	12	13	14	15
Snow depth	35	11	13	7	7
Ice thickness	205				
	Position 16	17	18	19	20
Snow depth	6	6	6	6	17
Ice thickness					
	Position 21	22	23	24	25
Snow depth	7	19	16	27	14
Ice thickness					
	Position 26	27	28	29	30
Snow depth	13	7	12	10	7
Ice thickness					
	Position 31	32	33	34	35
Snow depth	4	20	15	22	42
Ice thickness					
	Position 36	37	38	39	40
Snow depth	31	21	37	35	18
Ice thickness					
	Position 41	42	43	44	45
Snow depth	17	31	27	8	9
Ice thickness					
	Position 46				
Snow depth	7				
Ice thickness					

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# STUDENT SHEET 7d *continued*

## Questions



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Once you have created your own daily chart of the ice and snow thickness, here are some questions for you to answer:

1. Why do you think the measurements took such a long time?
2. Why were they only taking 46 measurements each day?
3. Why might Pen have been unable to take 10 measurements of ice thickness?
4. If they had a radar that takes the measurements, why was the team taking measurements by hand?
5. What difference are these measurements going to make?
6. You will notice there are some days that Pen didn't take any data readings. Can you think of some reasons why this is?
7. Why would companies want to sponsor an expedition of this sort?
8. What was the mean average ice thickness for the data collected on 1 March 2009?
9. Is a daily mean average of ice thickness more useful than several different readings? Give reasons for your answer.
10. The mean average snow thickness for the data collected on 1 March 2009 is 16.78cm. Does this figure give an accurate picture of the snow thickness that was sampled? Give reasons for your answer.

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