STUDENT SHEET 4a

Copepod survival adult data sheet
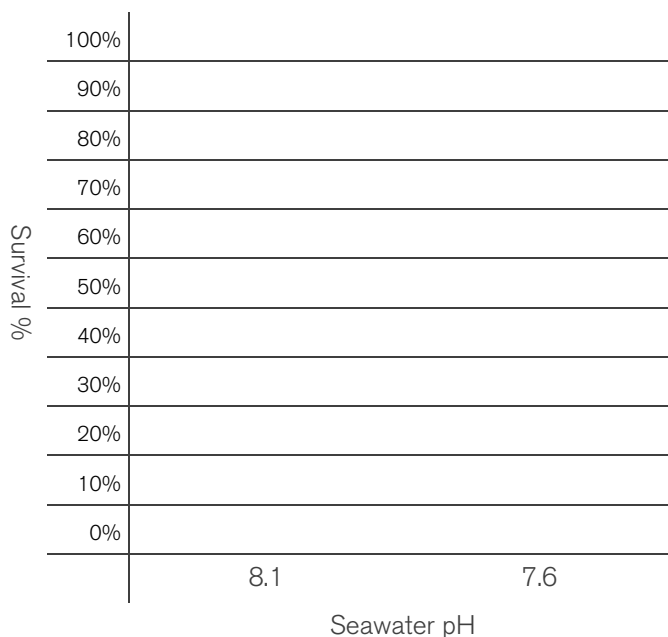
Current pH

Number of alive Calanus

pH	Batch	day 0	day 7	% Survival
8.1	1	15	14	
8.1	2	15	14	
8.1	3	15	14	
8.1	4	15	15	
8.1	5	15	14	
8.1	6	15	15	
	Average			

Future pH

Number of alive Calanus

pH	Batch	day 0	day 7	%Survival
7.6	1	15	12	
7.6	2	15	15	
7.6	3	15	15	
7.6	4	15	12	
7.6	5	15	15	
7.6	6	15	11	
	Average			

Simplified data set from Catlin Arctic Survey

Copepod adult survival rates

The data above shows the survival rate of the adult copepods in two experimental batches. The first set of copepods were exposed to current seawater pH (8.1) and the second set of copepods were exposed to seawater pH (7.6) predicted for the future.

15 adult Calanus copepods were counted into each exposure at the start. Experiments ran for 7 days and alive adults were counted at the end of the experiment to see how many survived.

Answer all questions:

1. How do you calculate the % survival rate?

2. Calculate the survival % for all batches of copepods and fill in the relevant boxes.

3. How do you calculate the average survival %?

4. Calculate the average survival % for both sets of data

5. What does this data tell you about the impact of future ocean acidification on adult copepods?

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