

		
	<p style="text-align: center;">CHANGING FOR CLIMATE CHANGES</p>	

Experiment 5: Consequences of more CO₂ on acidification of sea-water

1. INTRODUCTION

According to the researchers, more than half of the CO₂ absorbed worldwide ends up in the ocean. Krill, plankton and seaweed play a significant role in this. ... The ocean stores 50 times more CO₂ than the atmosphere and 20 times more than plants on land. But since we produce more and more CO₂ we have to look at the consequences of that on the sea-water and the living organisms in the water.

2. ORIENTATION

What are the consequences of more CO₂ on acidification of sea-water?

3. PREPARATION

3.1. Materials:

- 2 cups
- (distilled) water
- Straw
- pH test strips

3.2. Method:

- Fill the cups half way with (distilled) water

- Put in each cup a pH test strip – cup 1 is the reference-cup
- Blow into cup 2 for one minute

4. RESULTS

Observations:

Compare the pH of the 3 cups – is the water acid, basic or neutral?

In the cup you have blown (CO₂) the pH is 6. In the cup with ordinary tap water, the pH is 8. So CO₂ makes water more acidic.

.....

.....

.....

5. REFLECTION

Can you make the connection between this experiment and the effect of greenhouse gases on the ocean?

Cos makes the oceans more acidic. This is bad for the life in the oceans. (see also experiment

4).....

.....

.....

.....

.....

..

6. e-book

Take several pictures during the experiment. You can also film it.