

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

## Experiment 5: Consequences of more CO<sub>2</sub> on acidification of sea-water

### 1. INTRODUCTION

According to the researchers, more than half of the CO<sub>2</sub> absorbed worldwide ends up in the ocean. Krill, plankton and seaweed play a significant role in this. ... The ocean stores 50 times more CO<sub>2</sub> than the atmosphere and 20 times more than plants on land. But since we produce more and more CO<sub>2</sub> 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 CO<sub>2</sub> 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 (CO<sub>2</sub>) the pH is 6. In the cup with ordinary tap water the pH is 8. So CO<sub>2</sub> makes water more acid.....

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#### 5. REFLECTION

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

CO<sub>2</sub> makes the oceans more acid. This is bad for the life in the oceans. (also see experiment 4).....

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