

Module 1: What is Chemistry?

Getting Started: A Day at the Beach with Chemistry Presentation Notes

Introduction

The screenshot shows a presentation interface. On the left, a dark grey bar contains the text 'A Day'. A white text box with a purple 'i' icon in a circle contains the following text: 'Introduction Chemistry is all around you - even at the beach. In this interactivity, click on each of the spinning icons to learn more about the chemical processes and properties that you can find on the beach. Once you have viewed the interactivity, look around you. Where is chemistry in your life?'. The background is a photograph of a crowded beach with people, umbrellas, and towels. Four purple circular icons with white person silhouettes are overlaid on the beach scene, indicating interactive points.

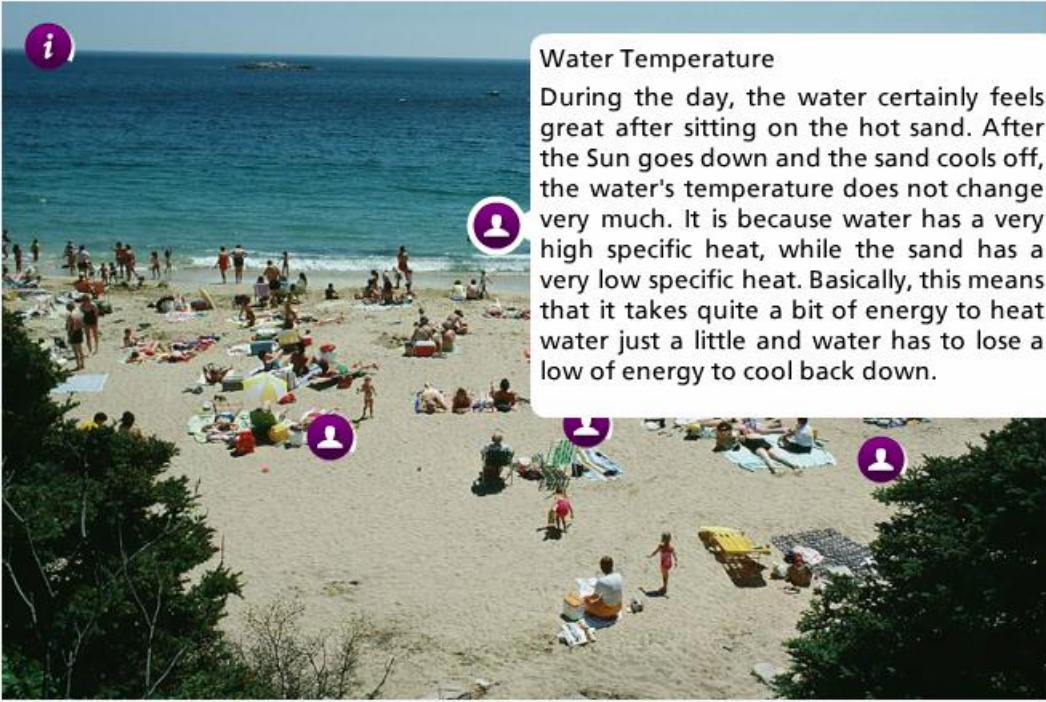
Chemistry is all around you - even at the beach. In this interactivity, click on each of the spinning icons to learn more about the chemical processes and properties that you can find on the beach. Once you have viewed the interactivity, look around you. Where is chemistry in your life?

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Water Temperature

A Day at the Beach with Chemistry



Water Temperature

During the day, the water certainly feels great after sitting on the hot sand. After the Sun goes down and the sand cools off, the water's temperature does not change very much. It is because water has a very high specific heat, while the sand has a very low specific heat. Basically, this means that it takes quite a bit of energy to heat water just a little and water has to lose a low of energy to cool back down.

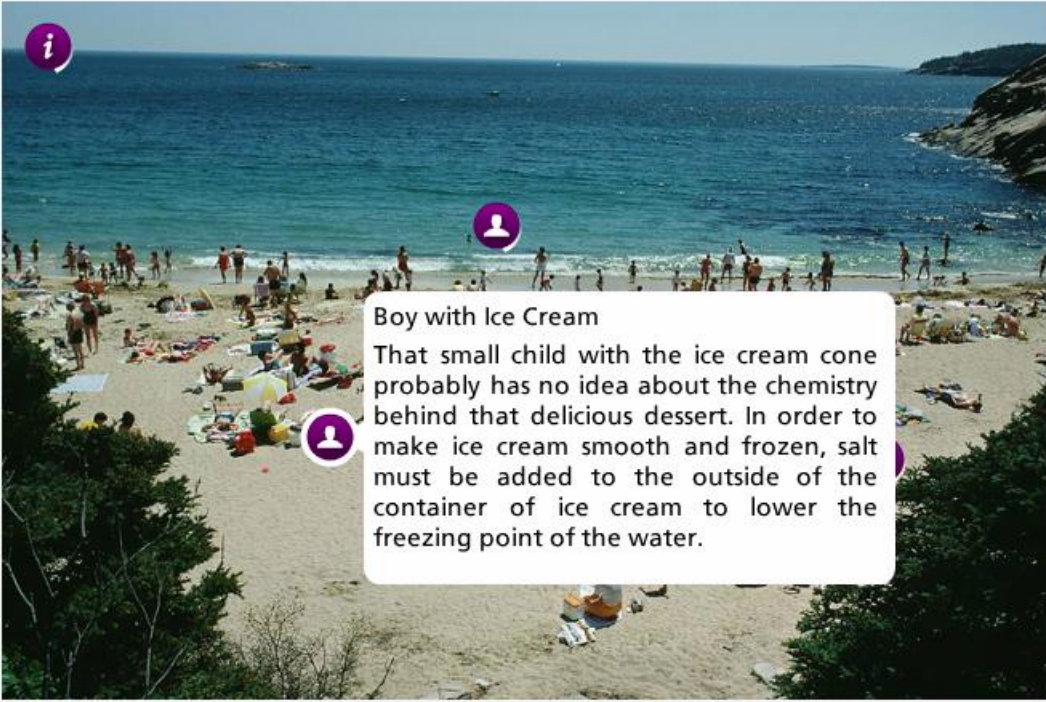
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Boy with Ice Cream

A Day at the Beach with Chemistry



Boy with Ice Cream

That small child with the ice cream cone probably has no idea about the chemistry behind that delicious dessert. In order to make ice cream smooth and frozen, salt must be added to the outside of the container of ice cream to lower the freezing point of the water.


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Soda

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Soda

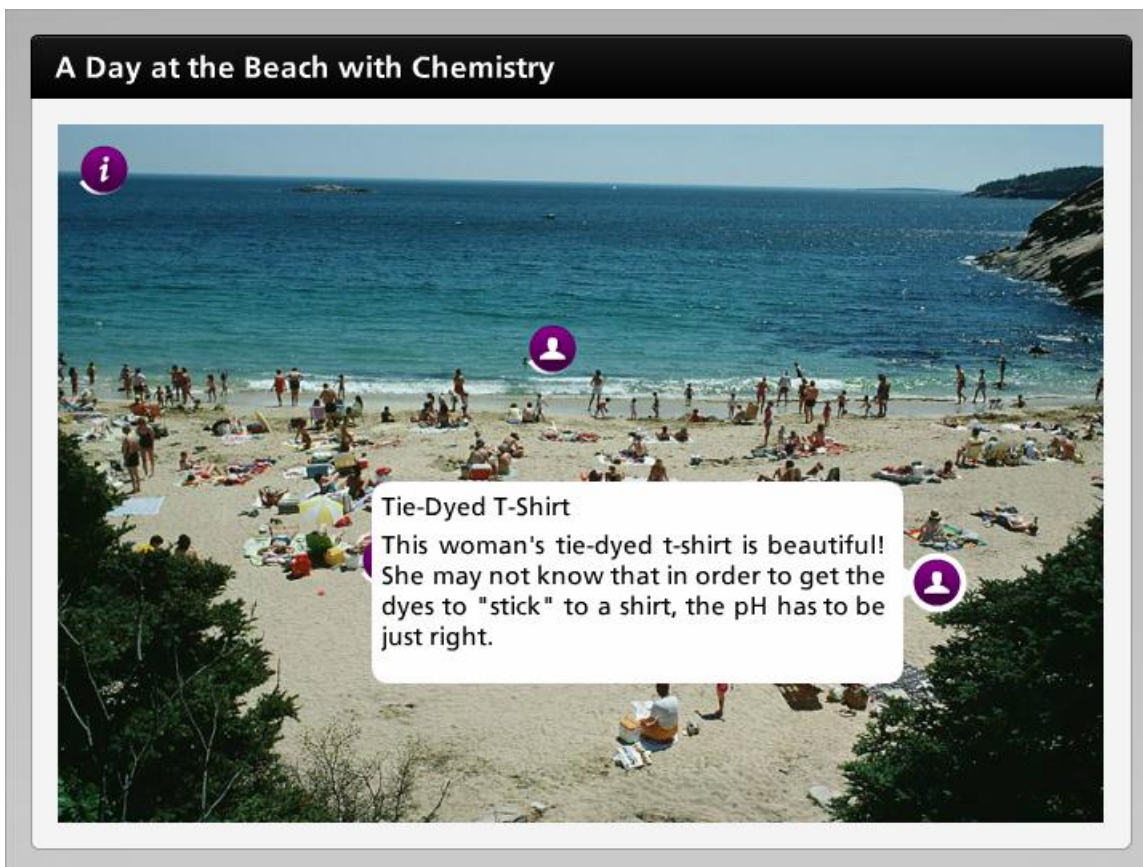
It sure is hot at the beach! A nice cold soda would probably sound good to many of the people on the beach. This person's soda has been out in the Sun, and it has gone flat. Why? Because gases dissolve better in cold liquid rather than hot liquid.

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Tie-Dyed T-Shirt



This woman's tie-dyed t-shirt is beautiful! She may not know that in order to get the dyes to "stick" to a shirt, the pH has to be just right.