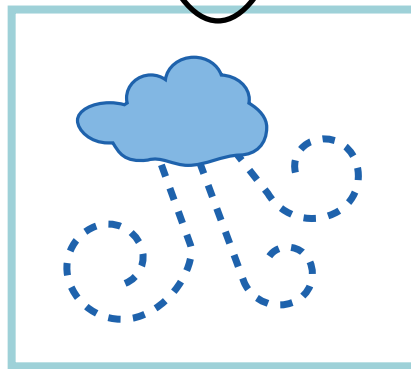
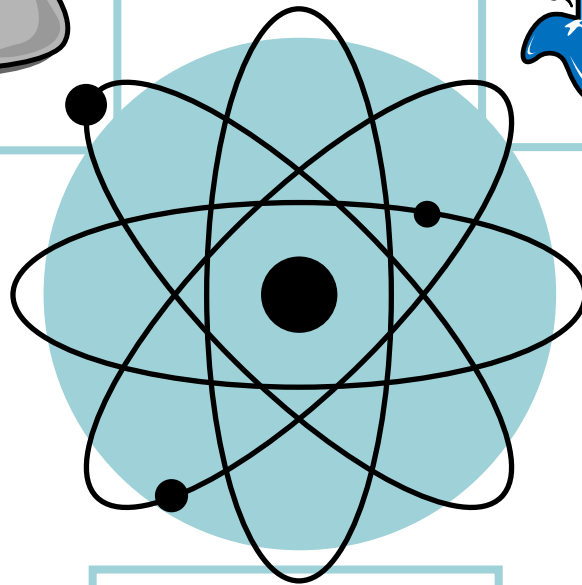
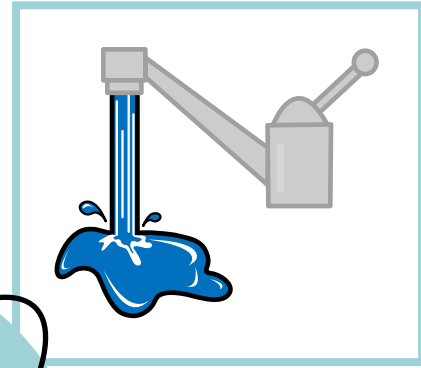
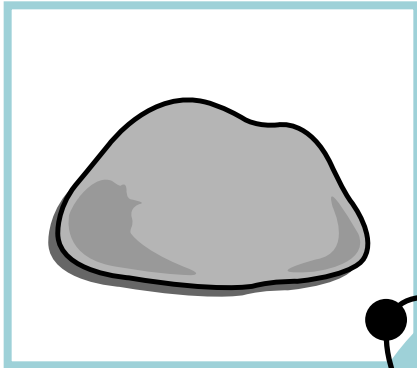


What's It Made of ?

Level H/I

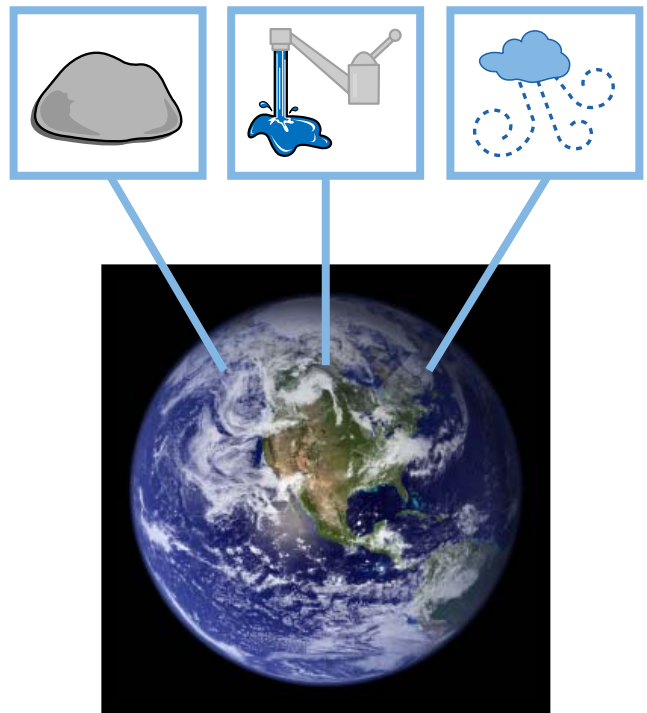


by Kathy Staugler

Illustrated by Travis Schaeffer

Our world is made up of many materials. Scientists call these materials *substances*. To learn about a substance

we ask, “What is it made of?” Rocks, water, and air are made of materials.



Yet the substances

in rocks, water and air are very different.

When we look and feel rocks, water or air, we know that they are different.

Each substance is made of tiny little building blocks called *atoms*. Billions of atoms are grouped together to make a substance.

Scientists have a name for these different



kinds of atoms. They call them elements.

Oxygen is an element. Oxygen is an element in air. We need oxygen to breathe.

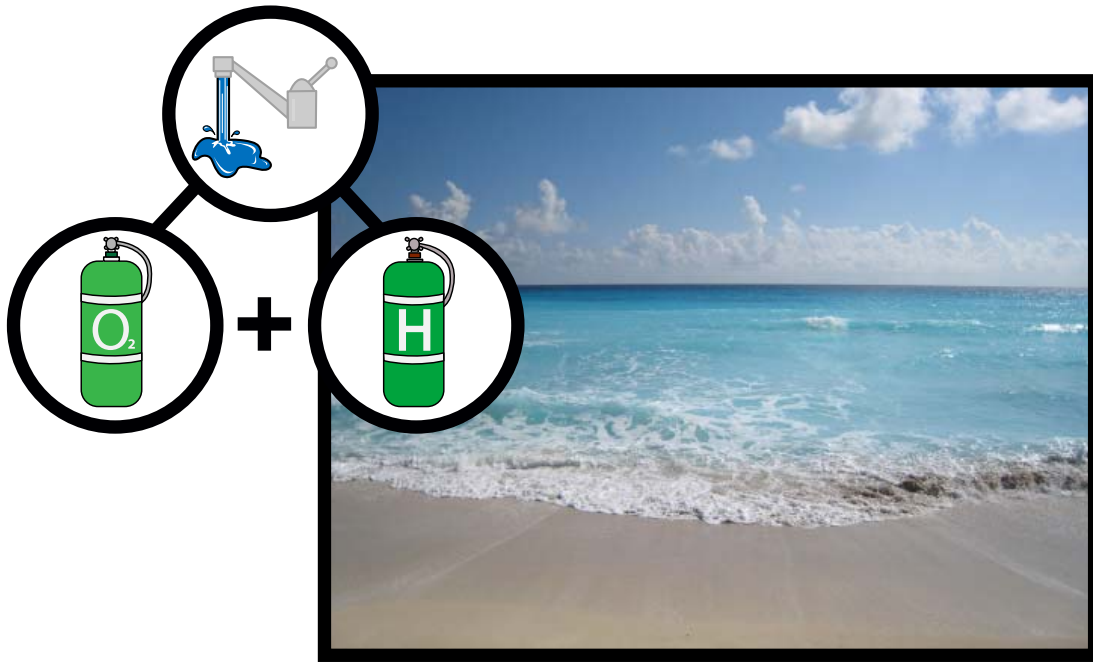




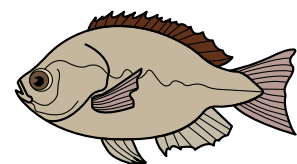
Carbon dioxide is a combination of two elements. It is made of carbon and oxygen. Carbon dioxide is a gas in the air that plants use to make food.

We cannot see carbon dioxide or oxygen. But both of them are in the air around us.



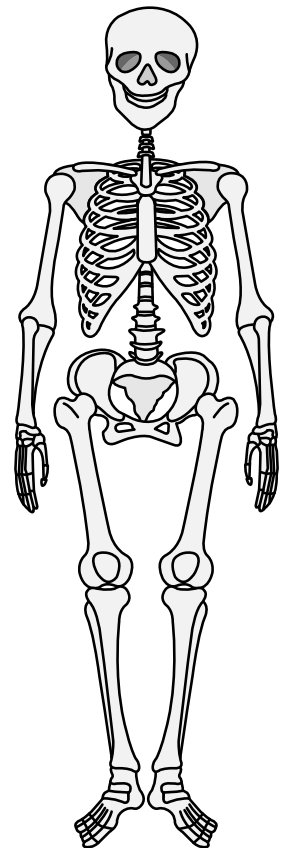


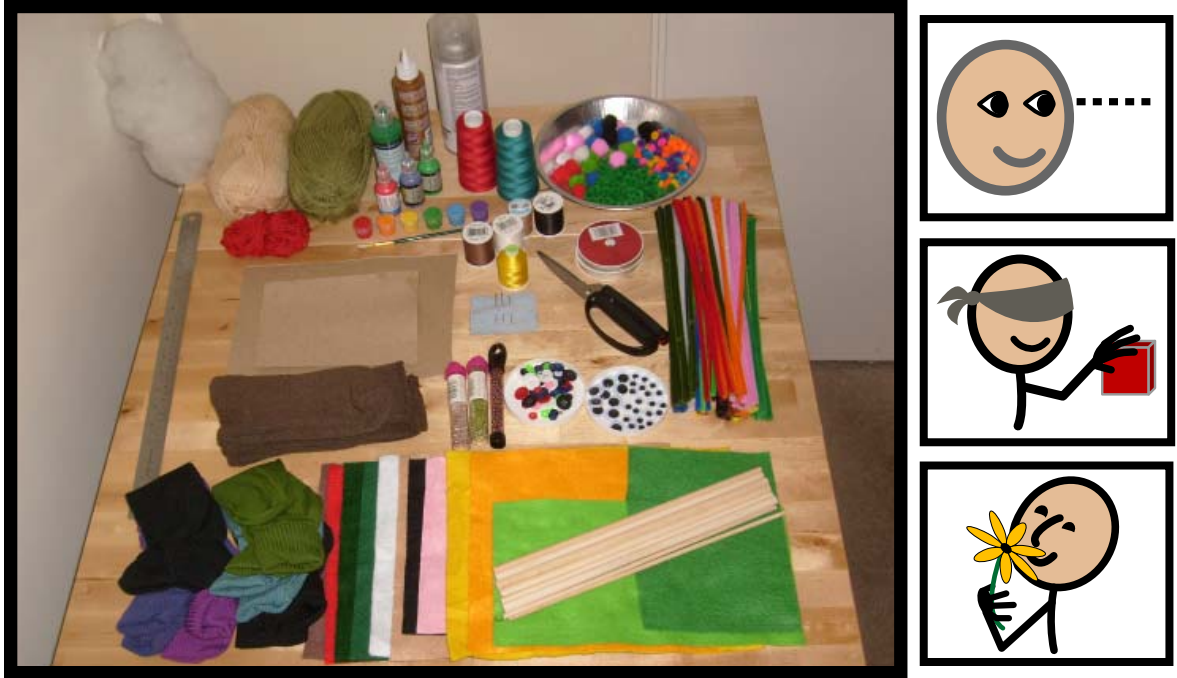
Pure water is a combination of two elements. Water is made of oxygen and hydrogen. In the water, fish use the oxygen to breathe. The ocean water has salt in it. The ocean has salt in the water. Water also has minerals that come from the soil and plants.





Milk has many elements.
Most of milk is water. Milk
also has the element of
calcium. Our body needs
calcium to help our teeth
and bones grow.

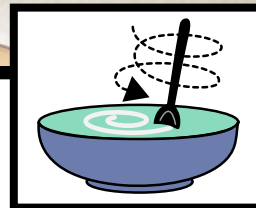
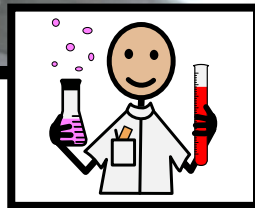




Scientists learn how to mix different elements to make new things for us. Before scientists learned about atoms, they looked at materials and described them. How does it look? How does it feel? How does it smell? We can be a scientist when we describe something.

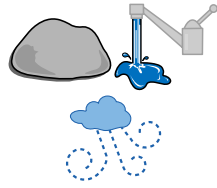
Scientists also learn about substances when they mix them up. Scientists are like cooks who mix ingredients to make

a cake. How does the batter change when we mix water and eggs to the

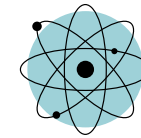


mix? How does the batter change when we heat it in the oven? This is how a scientist learns about new substances.

yes



What's It Made of ?



no



<p>breathe</p>	<p>mix</p>	<p>substances</p>	<p>rock</p>	<p>water</p>	<p>air</p>
<p>look</p>	<p>feel</p>	<p>atom</p>	<p>scientist</p>	<p>oxygen</p>	<p>elements</p>
<p>smell</p>		<p>carbon dioxide</p>	<p>hydrogen</p>	<p>fish</p>	<p>ocean</p>
		<p>salt</p>	<p>milk</p>	<p>calcium</p>	<p>body</p>

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