

Name _____

Date _____

Period _____

Lesson 4: What Exactly is Ocean Acidification?

<p>1. Humans have been releasing carbon dioxide (CO₂) into the atmosphere in large quantities since the Industrial Revolution. CO₂ is released during combustion: when we drive our cars, power our houses and factories, use electricity, burn things, and cut down trees.</p>	<p>2. The ocean acts as sponge and absorbs about 30 percent of the CO₂ from the atmosphere. However, as levels of CO₂ rise in the atmosphere, so do the levels of CO₂ in the ocean.</p>	<p>3. This is not great news for our ocean or the organisms that make their home there. When CO₂ mixes with seawater, a chemical reaction occurs that causes the pH of the seawater to lower and become more acidic. This process is called ocean acidification.</p>
<p>4. Even slight changes in pH levels can have large effects on marine organisms, such as fish and plankton.</p>	<p>5. Ocean acidification also reduces the amounts of calcium carbonate minerals available to shell-building organisms, such as plankton, oysters, coral, and sea urchins, to build and maintain their shells and skeletons.</p>	<p>6. The damage to these shell-building organisms can have a negative ripple effect throughout the entire ocean food web.</p>

After you read each section, create a colorful illustration to represent each panel of the story.