

SECTION  
10.2

DARWIN'S OBSERVATIONS  
**Power Notes**

Main Idea	Detail Notes
<p>I. Darwin observed <b>variation</b> among island species.</p> <p>Tortoises</p> <p>Finches</p> <p>Plants</p> <p>Fossil Evidence</p> <p>Geologic Evidence</p>	<p>1. <b>Variation is:</b></p> <p>The difference in the physical traits of an individual from those of other individuals in the group to which it belongs.</p> <p>2. <b>Examples include:</b> Tortoises:</p> <p>Example: Saddle-backed tortoises, which have long necks and legs, live in areas with a lot of tall plants. Domed tortoises, with shorter necks and legs, live in wet areas with short plants.</p> <p>3. Finches:</p> <p><b>Example:</b> Finches with strong, thick beaks live in areas with a lot of large, hard-shelled nuts, while finches with more delicate beaks are found where insects or fruits are widely available.</p>
<p>II. Darwin realized species could adapt to their environment.</p>	<p>1. An <b>Adaptation is:</b></p> <p>A feature that allows an organism to better survive in its environment.</p> <p><b>Beak size differences for different uses in different Finch species</b></p>
<p>III. Darwin observed fossil and geologic evidence of an ancient Earth.</p>	<p>1. <b>Fossil evidence included:</b></p> <p>Glyptodon, a giant extinct armadillo that resembled living armadillos. Also fossil shells of marine organisms high up in the mountains, showing great changes that occurred in the past.</p> <p>2. <b>Geologic evidence included:</b></p> <p>Land that had been underwater was moved above sea level due to an earthquake, demonstrating that daily geologic processes can add up to a great change over a long period of time.</p>