

## Hole-y Bones

1. Calcium is important to build and maintain strong bones and teeth.
2. As bone mass is lost, the bones weaken and become fragile, making fractures more likely.
3. Answers will vary by age: the adult recommended daily allowance (RDA) is 1200 mg; children's RDA is 800 mg.
4. To prevent bone mass loss, you should get the recommended daily amount of calcium, preferably by eating calcium-rich foods and by being physically active to help strengthen bones.

## Bendy Bones

1. The bone left in the water (the control bone) was the strongest. The bone that had been soaking in the vinegar for the longest amount of time was the weakest. You could determine the strength of the bone by whether or not the bone would bend.
2. Vinegar, an acid, slowly dissolves the calcium in the bones, making them weak.
3. The bone weakens and becomes flexible. The bones left in the vinegar continued to get weaker so the angle at which you could bend them increased.
4. Long-term effects of calcium loss can include an increased chance of broken bones, unhealthy teeth and gums, and rickets.

## Rate That Snack

1. Vitamins and minerals help the body grow, develop, and stay healthy.
2. Answers will vary, but should include fruits, vegetables, and low sugar snacks.
3. Most common snack foods are high in fats, sugar, and sodium and may replace nutritious snacks that are better for a healthy body.
4. Answers will vary, but students should identify unhealthy snacks.
5. Answers will vary, but healthy lists should include such snacks as raw vegetables, fresh fruit, low fat-yogurt, popcorn, or nuts.

## Counting the Calcium

1. Calcium is necessary to build strong bones and teeth, regulate the heartbeat, clot the blood, maintain proper thyroid function, and help transmit nerve impulses.
2. Some common calcium-rich foods include broccoli, beans, and dairy products, such as milk, cheese, and yogurt.
3. Vitamin D helps the body absorb the calcium that is consumed.
4. We can get vitamin D from fortified foods, but most of it is made in our skin when we are exposed to sunlight.
5. Eating calcium-rich foods is the best way to add calcium to our diets.