

REVIEW

9

SECTION 9.3

What Is Energy?

1. **Define** the following terms:

a. kinetic energy

b. potential energy

c. mechanical energy

2. **Calculate** the gravitational potential energy of a 95 kg rock at the top of a 45 m cliff. The acceleration due to gravity is 9.8 m/s^2 .

3. **Calculate** the kinetic energy of a bicyclist traveling at 11 m/s. The total mass of the cyclist and the bike is 74 kg.

4. **Identify** the type of energy stored in a stretched bungee cord.

5. **Explain** how sunlight is converted into potential energy by plants.

6. **Explain** how the kinetic energy of an object changes when the speed of the object doubles.

7. **Contrast** chemical energy and mechanical energy.
