Energy and power

Science • Grade 9 • Student worksheet

Name: _____ Date: _____

1. A 10 N force moves a box 5 m in the direction of the force. Find work.

2. A 2 kg object moves at 6 m/s. Find kinetic energy.

3. A 4 kg object is raised 3 m. Use g = 10 m/s². Find potential energy gained.

4. A motor transfers 900 J in 15 s. Find power.

5. How does kinetic energy change when speed doubles at constant mass?

6. Name the main energy conversion in a battery-powered torch.

Energy and power

Science • Grade 9 • Answer key

1. 50 J

2. 36 J

3. 120 J

4. 60 W

5. It becomes four times as large.

6. Chemical to electrical energy, then light and thermal energy.