

Worksheet: Work, Energy and Power

CBSE · Class 11 · Physics · 5 questions · 12 marks

Name: _____

Date: _____

Score: _____ / 12

Q1. A force $F = (2\mathbf{i} + 3\mathbf{j})$ N displaces a particle by $d = (4\mathbf{i} - \mathbf{j})$ m. Find the work done. *[2 marks]*

Q2. A spring ($k = 200$ N/m) is compressed by 5 cm. Find the energy stored. *[2 marks]*

Q3. Can kinetic energy be negative? Can potential energy be negative? *[2 marks]*

Q4. A 1000 kg car accelerates from rest to 20 m/s in 10 s. Find the average power. *[3 marks]*

Q5. In an elastic collision a 2 kg ball at 4 m/s hits a 4 kg ball at rest. Find the final velocities. *[3 marks]*
