

1.1 Part 1

Two students each apply a force of 750 N to a car and push it a distance of 12 meters across the parking lot. What is the total amount of work done on the car?

1.1 Part 2

If the students use 35 seconds to perform their work,
how much power do they exert?

1.2 Part 1

It takes 2.8 seconds for Erik to lift a 1581 N barbell 1 meter off his chest. How much work does he do?

1.2 Part 2

How much power does he exert?

1.3

How high is a 500 N boulder raised if it takes 4.6 seconds to use 1200 Watts of power?

1.4

How much work is performed in carrying a 900 Newton box 10 meters across a room?

1.5

What is the weight of a box if it takes 3.9 Watts of power to lift it 2 meters in 0.7 seconds?

6.1 Quick Poll

A 3 kg book is sitting on top of a 1.2 meter high shelf. How much GPE does it have?

Quick Poll 7.1

A 75 kg runner sprints at 8.3 m/s for 9 seconds. How much KE does he have?

Quick Poll 8.1

What 2 types of energy add together to make up the category of Mechanical Energy?

1)

2)

Quick Poll 9.1 Part 1

A 25 kg puma is standing on top of a 5 meter high rock. How much GPE does he have as he sits on the rock?

Quick Poll 9.1 Part 2

How much KE does he have as he sits on the rock?

Quick Poll 9.1 Part 3

What is his total Mechanical Energy?

Quick Poll 10.1 Part 1

A 25 kg puma jumps down from the top of a 5 meter high rock. How much KE does he have as he reaches the ground?

Quick Poll 10.1 Part 2

How much GPE does he have as he reaches the ground?

Quick Poll 10.1 Part 3

What is his total Mechanical Energy?

Quick Poll 11.1 Part 1

How much KE did the puma have as he reached the ground?

Quick Poll 11.1 Part 2

How fast is the puma moving as he reaches the ground?