



PHYSLETS ANSWER SHEET

ES1A6

Energy / Set 1 / Animation 6

Name \_\_\_\_\_ Class \_\_\_\_\_

<Show all work on calculations. Include proper units. Explanations require complete sentences.>

1) Calculate the force needed to pull the box up the hill.

\_\_\_\_\_ N

2) Calculate the work on the box to bring it up the hill.

\_\_\_\_\_ J

3) Calculate the power needed to move the box up the hill.

\_\_\_\_\_ W

4) If the box were released from its position at the top of the hill, how fast would it end up moving?

\_\_\_\_\_ m/s

5) Which of the following is true:

- A) The box exerts more force on the truck than the truck exerts back on the box.
- B) The truck exerts more force on the box than the box exerts back on the truck.
- C) The truck and the box exert equal amounts of force on each other.

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