

QUIZZ

Energy Efficiency
9 Questions

NAME : _____

CLASS : _____

DATE : _____

1. No machine in existence has 100% efficiency due to _____.

magic

friction

smoke

input

2. What is the efficiency of a machine if 55.3 J of work are done on the machine, but only 14.3 J of work are done by the machine?

0.25 Joules

26%

3.86 Joules

386%

- 3.



This car needs 8600J of energy to power it. If 5000J is changed into useful energy, how much energy is wasted?

13600J

3600J

5000J

8600J

4. A car transfers 100 J of chemical energy in order to gain 50 J of kinetic energy. The efficiency of the car is

20%

0.5%

50%

200%

5. What is the efficiency of the machine if the input is 263 J and the output is 142 J?

6.26% 54%

100% 260%

6. What is the efficiency of a machine that has work input of 40 joules and work output of 35 joules?

87.50% 1200

1.142 114%

7. What is the useful work output of a machine that consumes 2,800 Joules and an efficiency of 40%?

7000 J 2760 J

1120 J

8. What percent energy is wasted by a machine if the energy input is 262 J and the energy output is 131 J?

5% 50%

100 J

9. What is the work output of a machine that has a work input of 2,800 Joules and an efficiency of 90%?

25200 J 2520 J

0.0082J

