



Useful and Wasted Energy

8 Questions

NAME : _____

CLASS : _____

DATE : _____

1. What is the main energy transfer that happens in a gas heater?

- | | |
|--|---|
| <input type="checkbox"/> a) Electrical energy to heat energy | <input type="checkbox"/> b) Chemical potential energy to heat energy |
| <input type="checkbox"/> c) Kinetic energy to heat energy | <input type="checkbox"/> d) Chemical potential energy to kinetic energy |

2. What is "useful output" energy?

- | | |
|--|--|
| <input type="checkbox"/> a) Energy that is used by the appliance | <input type="checkbox"/> b) Useful energy that is put into the system |
| <input type="checkbox"/> c) Energy that is produced that we cannot use | <input type="checkbox"/> d) Energy that is produced that we can use to do work |

3. What does it mean if a system is "energy efficient"?

- | | |
|---|--|
| <input type="checkbox"/> a) It has less wasted output energy | <input type="checkbox"/> b) It has less useful output energy |
| <input type="checkbox"/> c) It has more input energy than output energy | <input type="checkbox"/> d) Energy is used quickly |

4. What is "wasted output" energy?

- | | |
|--|--|
| <input type="checkbox"/> a) Energy that is used by the appliance | <input type="checkbox"/> b) Useful energy that is put into the system |
| <input type="checkbox"/> c) Energy that is produced that we can use to do work | <input type="checkbox"/> d) Energy that is produced that we cannot use |

5. In an electric drill, the input energy is electrical energy.
Which of these is useful output energy?
A – Sound energy
B – Kinetic energy
C – Heat energy

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> a) A, B | <input type="checkbox"/> b) B, C |
| <input type="checkbox"/> c) A, C | <input type="checkbox"/> d) B |

6. In an electric drill, the input energy is electrical energy.
Which of these is wasted output energy? A – Sound energy
B – Kinetic energy C – Heat energy
- ☐ a) A, B ☐ b) A, C
- ☐ c) B, C ☐ d) B

7. In a microwave oven, the input energy is electrical energy. Which of these is useful output energy? A – Sound energy B – Kinetic energy C – Heat energy D – Light energy
- ☐ a) A, B, C ☐ b) A
- ☐ c) B, C, D ☐ d) C

8. In a microwave oven, the input energy is electrical energy. Which of these is wasted output energy? A – Sound energy B – Kinetic energy C – Heat energy D – Light energy
- ☐ a) A ☐ b) A, B, C
- ☐ c) C ☐ d) B, C, D

Answer Key

1. b

2. d

3. a

4. d

5. d

6. b

7. c

8. a