Electromagnetism

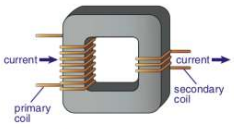
Sci F

Name _____ Class _____ Date _____

1 What is the relationship of a **motor** to a **generator**?

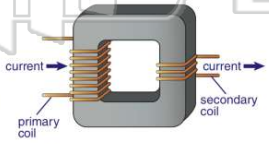
A they do the same thing
B they make electricity
C they are opposites
D one can replace the other

2 What **evidence** is there in this diagram that this is a **step-down transformer**?



A more wire loops where current goes in
B current goes in on the left and out on the right
C more wire loops where current goes out
D the magnet is bigger on one side

3 The device pictured below is a type of **transformer** used to _____.



A increase current
B decrease voltage

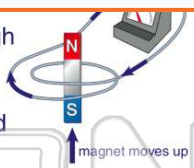
4 In the diagram below, **falling water** is being used to produce **electricity**. How is this achieved?

A falling water runs a motor
B falling water

5

7

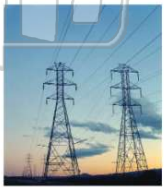
B a magnet moves through the coils of wire
C a conductor moves through a magnetic field
D all of the above



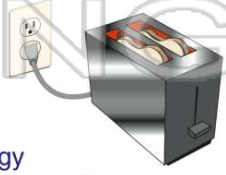
A The bell has to have a step-down transformer in it.
B The bell has to have a generator in it.
C The bell has to have a small motor in it.
D The bell has to have a step-up transformer in it.

9 The **rate** at which electrical energy is transformed to **another form** of energy is called _____.

A current
B generation
C power
D ohms



10 An electric toaster **requires power** to convert _____.



A heat energy to mechanical energy
B electrical energy to mechanical energy
C electrical energy to thermal energy
D heat energy to thermal energy

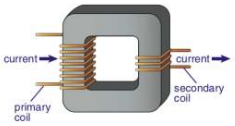
ANSWER KEY

What is the relationship of a **motor** to a **generator**?

A they do the same thing
B they make electricity
C they are opposites
D one can replace the other

c

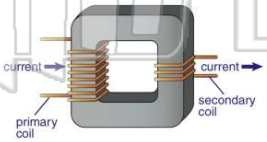
What **evidence** is there in this diagram that this is a **step-down transformer**?



A more wire loops where current goes in
B current goes in on the left and out on the right
C more wire loops where current goes out
D the magnet is bigger on one side

a

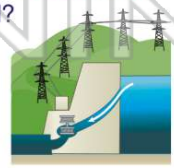
The device pictured below is a type of **transformer** used to _____.



A increase current
B decrease voltage
C decrease resistance
D

b

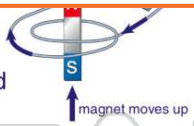
In the diagram below, **falling water** is being used to produce **electricity**. How is this achieved?



A falling water runs a motor
B falling water turns an engine
C falling water turns a turbine

c

the coils of wire
C a conductor moves through a magnetic field
D all of the above



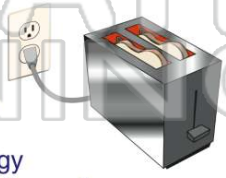
B The bell has to have a generator in it.
C The bell has to have a small motor in it.
D The bell has to have a step-up transformer in it.

The **rate** at which electrical energy is transformed to another form of energy is called _____.

A current
B generation
C power
D ohms

c

An electric toaster requires **power** to convert _____.



A heat energy to mechanical energy
B electrical energy to mechanical energy
C electrical energy to thermal energy
D heat energy to thermal energy

c