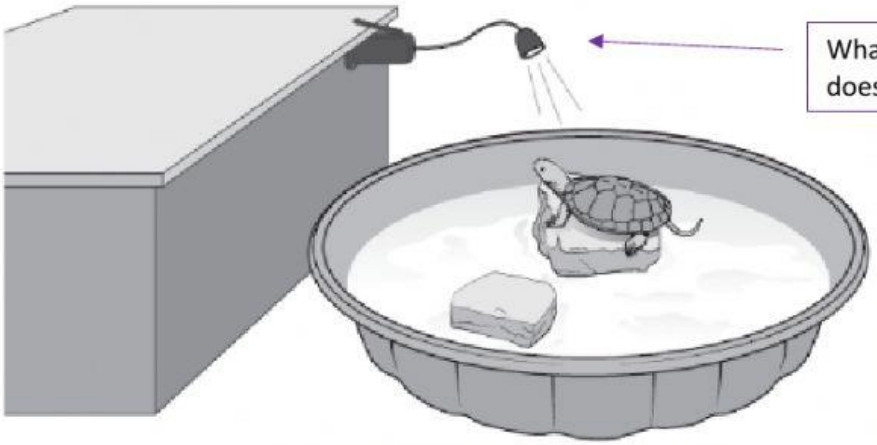
A science class is observing a pet turtle in a small plastic pool. The students turn on a portable camping lamp that is clamped on to a counter next to the pool.



What energy does this use?

They are asking what energy does the lamp use.

Which kind of energy is used by the portable lamp to produce light?

F Mechanical energy, because the lamp is clamped on to the counter

G Thermal energy, because the lamp increases the temperature of the water

H Electrical energy, because the lamp is battery-operated

J Sound energy, because the lamp vibrates when clicked on

Eight activities that use energy are listed in the box.

Thermal = heat
Mechanical = moving
Electrical = electricity
Sound = noise

1. A bus driver starts a bus.
2. A soccer player kicks a ball.
3. A teacher writes notes on a chalkboard.
4. A chef stirs soup on a stove.
5. A bird flaps its wings and chirps to attract a mate.
6. A basketball referee blows a whistle.
7. A waiter pours water into a glass.
8. A person changes the channel on a TV.

Each of these activities requires the use of which kind of energy?

A Thermal

B Mechanical

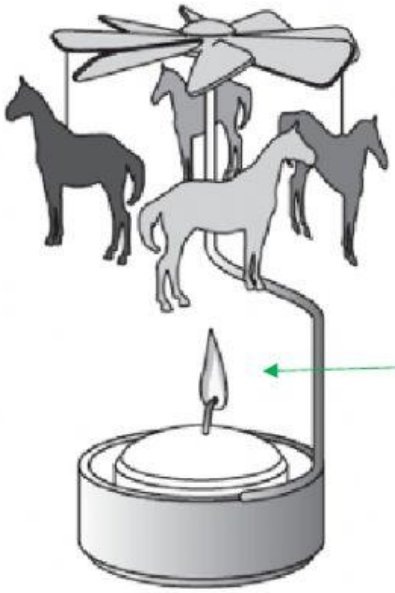
C Electrical

D Sound

There is ONE energy used by all these things

LIVEWORKSHEETS

An old-fashioned metal toy is shown below. When the candle is lit, the carousel of horses begins to turn.



What is this?
What energy is it?

Which of these correctly describes the energy that makes the carousel turn?

F Heat from the candle produces currents of warm air.

G Heat from the candle produces electrical energy.

H Light from the candle produces mechanical energy.

J Light from the candle produces wind currents.

The fire produces what energy?

A student uses a set of headphones to listen to music. Which of these objects uses the same source of energy as the headphones?

A A flute using wind energy

B A piano using mechanical energy

C A keyboard using electrical energy

D A teapot using thermal energy



The headphones USE this energy!

LIVEWORKSHEETS

Which of these is the best conductor of electricity?

F Glass rod

G Cotton string

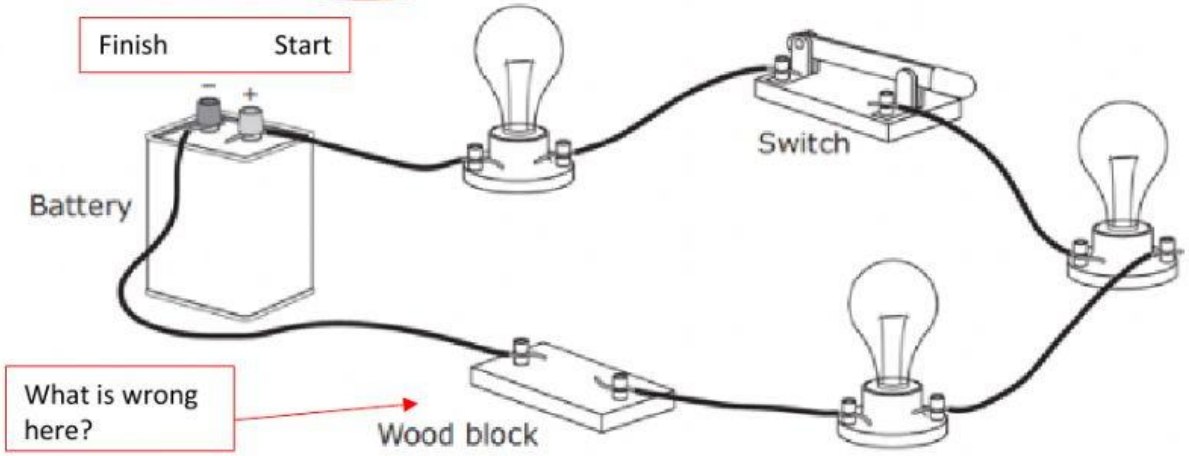
H Plastic tubing

J Copper penny

Conductors help flow electricity and heat



The circuit below does not work.



Which procedure would most likely allow the bulbs to light?

A Open the switch and then connect the two wires that are attached to the wood block

B Switch the positions of the two wires that are connected to the battery and then open the switch

C Move the switch closer in the circuit to the battery

D Connect the two wires that are attached to the wood block

How can you make this work?
For a circuit to work you need to make a circle

LIVEWORKSHEETS