

Energy All Around

Read how energy appears and changes during one school day.

5.2.b "there are many different forms of energy;"

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each name of an energy form. Number each sentence that tells how energy changes form or moves to another object.

Maya's Energy Day

- ① On a sunny morning, Maya sets a small solar oven near the school garden. Sunlight carries radiant energy from the Sun. The dark cooking tray absorbs some of that energy and warms up. This is thermal energy, the energy connected with temperature. The oven does not create energy. It changes energy from one form to another as its materials warm.
- ② Later, Maya closes a switch in a simple circuit. Chemical energy stored in a battery changes to electrical energy that moves through the wires. The electrical energy makes a tiny motor spin, producing motion energy. When the motor turns a small fan, moving air can make a paper strip flutter. Energy can be transferred to different objects during these changes.
- ③ At lunch, Maya taps a metal spoon against a cup. The vibrating cup and air produce sound energy, which travels to nearby ears. Her body also uses chemical energy from food. Muscles change some of that chemical energy into motion energy when she walks. Some energy becomes thermal energy and warms her body. Scientists describe these forms to explain what they observe in everyday events.

2 ANSWER WITH EVIDENCE Use the passage

1 What form of energy does sunlight carry, and what form does the cooking tray gain as it warms?

2 Name the three energy forms in the battery, wire, and motor change.

3 What produces sound energy when Maya taps the spoon against the cup?

4 When Maya walks, what does her body change chemical energy into? What other form of energy is also made?

3 YOUR TURN Your own words

Describe an everyday event that does not happen in the passage. In 2 or 3 sentences, name at least three forms of energy and explain two energy changes or transfers.

PART 1 • READ AND MARK

Underline each name of an energy form. Number each sentence that tells how energy changes form or moves to another object. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What form of energy does sunlight carry, and what form does the cooking tray gain as it warms?	Sunlight carries radiant energy. The warming tray gains thermal energy.
2	Name the three energy forms in the battery, wire, and motor change.	Chemical energy in the battery changes to electrical energy in the wires, then to motion energy in the spinning motor.
3	What produces sound energy when Maya taps the spoon against the cup?	The vibrating cup and air produce sound energy.
4	When Maya walks, what does her body change chemical energy into? What other form of energy is also made?	Her muscles change chemical energy into motion energy. Some energy also becomes thermal energy that warms her body.

PART 3 • YOUR TURN (SAMPLE ANSWER)

When I turn on a flashlight, chemical energy in the battery changes to electrical energy. The bulb changes electrical energy into light energy and thermal energy.

Accept accurate everyday examples that name at least three energy forms and clearly explain two changes or transfers. Accept light energy as radiant energy, and movement energy as motion energy.