

Forms of Energy: SC.5.P.10.1:

1) During a storm, the power goes out at Randall's house. His mother strikes a match to light a candle. As the match burns, it gives off light energy. What other form of energy does the burning match give off?

- A. chemical
- B. electrical
- C. mechanical
- D. thermal

2) Vincent's father is preparing noodles for dinner. He puts a pot of water on the electric stove to cook the noodles in. When the water starts to boil, he adds the noodles to the pot.

What form of energy causes the noodles to cook on the range?

- A. chemical
- B. heat
- C. light
- D. mechanical

3) Katie and her family are watching a fireworks display at an outdoor Fourth of July celebration. The fireworks store chemical energy, and when they are set off, they give off two forms of energy: light and which of the following?

- A. electrical
- B. mechanical
- C. solar
- D. sound

4) Solar power is a technology that relies on a renewable energy resource. Solar power changes energy from the Sun into a form of energy that can be used to heat our homes and run household appliances.

What form of energy must solar energy be changed into in order to run household appliances?

- A. chemical
- B. electrical
- C. light
- D. thermal

5) In many electrical factories, fossil fuels are burned to boil water and generate steam. This steam is then used to help generate electricity. What type of energy is given off by the fossil fuels and used to boil the water?

- A. chemical energy
- B. heat energy
- C. light energy
- D. sound energy

6) Fireworks are popular during celebrations. They light up the night sky and sometimes shake the ground with their explosions. The explosion noises are an example of what type of energy?

- A. electrical energy
- B. light energy
- C. mechanical energy
- D. sound energy

7) Bobbie is playing with his radio-controlled car by using a handheld remote box. What type of energy is being used to power Bobbie's car?

- A. chemical energy
- B. electrical energy
- C. heat energy
- D. mechanical energy

8) Miguel is rolling a ball down a hill. This is an example of which form of energy?

- A. chemical energy
- B. electrical energy
- C. mechanical energy
- D. thermal energy

9) Latisha notices that when she rubs her hands together, they feel warm. Which of the following is the best explanation for why this happens?

- A. energy is reflected into her hands
- B. heat energy is produced by the friction
- C. light energy of the Sun heats her hands
- D. energy is absorbed from the air molecules by her hands

10) Amber visits a theme park that has a roller coaster that travels upside down. Which of the following is the best explanation for why the roller coaster car stays in contact with the track when it travels upside down?

- A. The track and car are held together by a series of strong magnets.
- B. The car has large amounts of thermal energy that binds it to the track.
- C. The car has chemical energy that resists the effect of gravity when it is upside down.
- D. The car has mechanical energy and is fast enough that gravity cannot pull the car down.