Name: Date: Score: / 8

Speed and Energy: Learn and Practice

Faster things carry more energy

Read each question. Circle the best answer.

💡 Speed and Energy

- A moving object has energy of motion.
- The faster an object moves, the more energy it has.
- More energy means it can do more when it hits something.
- slow ball taps a pin, fast ball sends pins flying: more speed, more energy

1 ⚽ A ball sitting still on the floor has how much energy of motion?

A. A lot B. None

C. Twice as much as a rolling ball D. A little

2 What do we call the energy an object has because it is moving?

A. Stored food energy B. Energy of motion

C. Sound energy D. Light energy

3 🚗 A slow toy car and a fast toy car hit a wall. Which one hits harder?

A. The fast car B. Neither one hits

C. The slow car D. They hit the same

4 🎳 Why does a fast bowling ball knock down more pins than a slow one?

A. It carries more energy B. It is quieter

C. It is lighter D. It is colder

5 🚲 Which bike has the most energy of motion?

A. A parked bike B. A bike rolling slowly

C. A bike racing downhill

D. A bike leaning on a wall

6 If you throw a ball harder, what happens to its speed?

A. It goes slower B. It goes faster

C. It stops in the air D. It stays the same

7 🏃 Four runners are the same size. Which one has the most energy of motion?

A. The one sprinting B. The one standing

C. The one walking D. The one jogging

8 How can you give a marble more speed as it rolls down a ramp?

A. Roll it at night B. Start it higher on the ramp

C. Start it lower on the ramp

D. Paint it a new color

✏️ Explain it! Write two facts you learned about speed and energy.

ANSWER KEY

Speed and Energy: Learn and Practice (answers)

Faster things carry more energy

Read each question. Circle the best answer.

1 ⚽ A ball sitting still on the floor has how much energy of motion?

A. A lot **B. None**

C. Twice as much as a rolling ball D. A little

Energy of motion only comes from moving. A ball that is not moving has none at all.

2 What do we call the energy an object has because it is moving?

A. Stored food energy **B. Energy of motion**

C. Sound energy D. Light energy

Anything that moves has energy of motion. Scientists also call it kinetic energy.

3 🚗 A slow toy car and a fast toy car hit a wall. Which one hits harder?

A. The fast car B. Neither one hits

C. The slow car D. They hit the same

The fast car carries more energy, so it hits the wall harder. Speed and energy go together.

4 🎳 Why does a fast bowling ball knock down more pins than a slow one?

A. It carries more energy B. It is quieter

C. It is lighter D. It is colder

A faster ball has more energy of motion to pass on to the pins, so more of them go flying.

5 🚲 Which bike has the most energy of motion?

A. A parked bike B. A bike rolling slowly

C. A bike racing downhill

D. A bike leaning on a wall

The faster something moves, the more energy of motion it has. The racing bike is moving fastest, so it wins!

6 If you throw a ball harder, what happens to its speed?

A. It goes slower **B. It goes faster**

C. It stops in the air D. It stays the same

A harder throw gives the ball more energy, so it flies off faster. Nice arm!

7 🏃 Four runners are the same size. Which one has the most energy of motion?

A. The one sprinting B. The one standing

C. The one walking D. The one jogging

When runners are the same size, the fastest one has the most energy of motion. Sprinting is the fastest.

8 How can you give a marble more speed as it rolls down a ramp?

A. Roll it at night **B. Start it higher on the ramp**

C. Start it lower on the ramp

D. Paint it a new color

Starting higher gives the marble more height to fall, so it speeds up more and gains more energy.