

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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1. In old movies, people sometimes put their ear on a railroad track to see if a train is coming. This works because the iron rail

- A. is heated by friction.
- B. carries the sound better than air.
- C. is cooler than air.
- D. is connected directly to the train.

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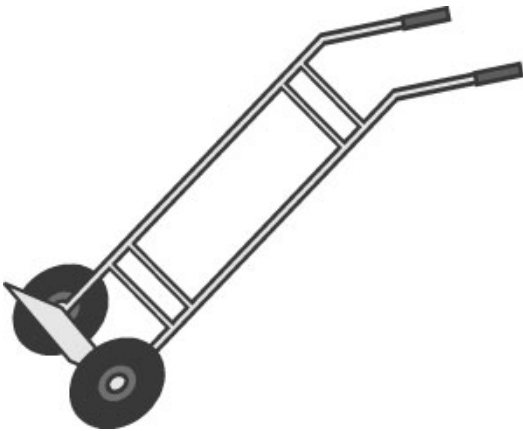
2. Which is a simple machine?

- A. water
- B. chair
- C. pulley
- D. candle

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3.

*Use the picture below to answer this question.*



The hand truck shown in the picture is used in stores to move boxes. Which simple machines are part of a hand truck?

- A. pulley and lever
  - B. lever and wheel and axle
  - C. inclined plane and wheel
  - D. pulley and inclined plane
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4. Which of the following statements about noise is true?

- A. Listening to loud music is less harmful if you do it a lot and get used to it.
  - B. Loud music is better for your ears than other sounds that are just as loud.
  - C. Loud music can damage the inside parts of your ears.
  - D. Hearing damage caused by loud noise eventually goes away.
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5. A guitar string makes a higher-pitched sound when you tighten the string. Which of the following explains why tightening the string causes this change?

- A. It changes the shape of the guitar.
  - B. It causes the string to get thinner.
  - C. Tightening the string makes it vibrate faster.
  - D. Tightening the string makes it longer.
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6. Ruth sat on the floor and played with a wooden spoon and a pan. If Ruth hit the pan with the spoon, it would sound most like a

- A. car horn.
  - B. crying baby.
  - C. drum.
  - D. train whistle.
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7. When light hits a dark object, most of the light is

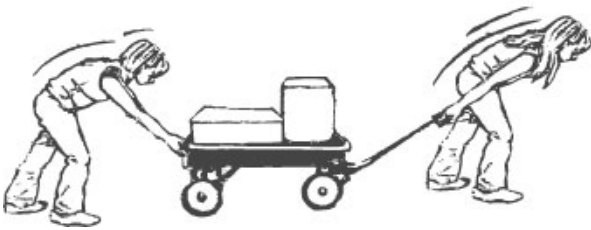
- A. absorbed.
  - B. reflected.
  - C. diffused.
  - D. refracted.
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8. Which could help a person in a wheelchair get from the street onto the sidewalk?

- A. lever
  - B. inclined plane
  - C. screw
  - D. wheel and axle
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9.

Use the pictures below to answer this question.



Sally was pulling her heavy cart by herself. Then Jo began pushing on the back of the cart. This will

- A. keep the cart going at the same speed.
  - B. make the cart go backward.
  - C. make the cart go slower.
  - D. make the cart go faster.
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10. Jane hears a fire truck siren that does not change in pitch or loudness. The fire truck is

- A. leaving the station.
- B. parked at the station.
- C. passing by the station.
- D. coming toward the station.

**Answer Key**

1. B) carries the sound better than air.
2. C) pulley
3. B) lever and wheel and axle
4. C) Loud music can damage the inside parts of your ears.
5. C) Tightening the string makes it vibrate faster.
6. C) drum.
7. A) absorbed.
8. B) inclined plane
9. D) make the cart go faster.
10. B) parked at the station.