Waves, Light, and Sound

Grade 4 Science Worksheet

Name _____ Date _____

Circle the answer.

1. Which change makes a wave's crests farther apart?

   a smaller amplitude a bigger amplitude a longer wavelength

   a shorter wavelength

2. Why can you see a red stop sign from far away at night when car lights shine on it?

   the driver's eyes light up the sign

   its surface reflects the headlights back toward the driver

   the sign makes its own red light

   the sign stores sunlight from the day

3. A student holds a rope and moves her hand up and down faster. The crests get closer together. What changed?

   the wavelength got shorter the wavelength got longer the amplitude got bigger

   the rope got longer

4. The distance from one crest to the next crest is called what?

   the amplitude the wavelength the trough the speed

5. A student claims bigger waves are always longer waves. Which example proves this wrong?

   two waves that are exactly the same

   a tall wave with crests far apart

   two waves with crests 5 cm apart, one taller than the other

   a short wave with crests close together

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Answer Key - Grade 4 Science Worksheet

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