Waves, Light, and Sound

Grade 4 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. A student says, "We see because our eyes shoot out beams of light." Which observation proves this wrong?
   - a lamp lets us see in the evening
   - our eyes can get tired at night
   - we cannot see objects in a room with no light
   - we can see bright colors on sunny days

2. Why can you see a lamp that is switched on, even in a dark room?
   - the lamp gives off its own light into your eyes
   - the dark room reflects light onto the lamp
   - your eyes shine light onto the lamp
   - the lamp reflects light from the Moon

3. Why does a cat's eye seem to shine in car headlights?
   - the headlights turn off near the cat
   - the cat's eye makes its own light
   - the eye reflects the headlight back
   - the cat's eye shines only at night

4. A whale's song can be heard many kilometers away. What does the sound wave carry through the water?
   - light from the whale's eyes
   - energy from the whale's vibrations
   - water from the whale's mouth
   - the whale's air bubbles

5. Wave A: 4 cm tall, crests 10 cm apart. Wave B: 8 cm tall, crests 10 cm apart. How are they different?
   - B has a longer wavelength but the same amplitude
   - they have the same amplitude and wavelength
   - B has a bigger amplitude but the same wavelength
   - B has a bigger amplitude and a longer wavelength

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Answer Key - Grade 4 Science Worksheet - Challenge Me

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