

A Million Whys Book 13: Science Quiz

The Light Expedition, by Crafty Clover.

Name: _____ Date: _____ Score: _____ / 10

The questions

- A. Why Does Light Travel in Straight Lines?
- B. Why Do Houseplants Lean Toward a Window?
- C. Why Do Screens Use Only Red, Green, and Blue Dots?
- D. Why Does a Red Apple Look Almost Black Under a Green Light?
- E. Why Do Some Lenses Make Things Look Smaller?
- F. Why Does a Sheet of Paper Glow When You Hold a Flashlight Behind It?
- G. Why Is Muddy Water Cloudy?
- H. How Does a Solar-Powered Calculator Work Without a Battery?
- I. Why Can a Laser Read the Tiny Bumps on a Disc?
- J. Why Do Airplanes and Boats Have Red and Green Lights?

Write the letter of the matching question next to each fact.

1. The same trick lets a magician change the colors of props with different colored lights. _____
2. A DVD's pits are smaller and closer together than a CD's, so it holds a lot more. _____
3. Up close, a white area on a screen is really a crowd of red, green, and blue dots all glowing at once. _____
4. Scientists use cloudiness, called turbidity, to check how clean a lake is. _____
5. Sunflowers in bud follow the Sun across the sky, then stop when they bloom. _____
6. Lanterns and lampshades often use paper to make a soft glow. _____
7. Remember: "left" and "red" are both shorter words than "right" and "green." _____
8. Builders and surveyors "sight along a line" to check that things are straight, using the fact that light does not wiggle on its own. _____
9. Solar cells power satellites and space stations, too. _____
10. A peephole squeezes a whole hallway into a tiny circle. _____

Watch a short video answer for every question at xdme.com

Answer key

1. **D** (The same trick lets a magician change the colors of props with different colored lights. Book 13, Question 48)
2. **I** (A DVD's pits are smaller and closer together than a CD's, so it holds a lot more. Book 13, Question 123)
3. **C** (Up close, a white area on a screen is really a crowd of red, green, and blue dots all glowing at once. Book 13, Question 33)
4. **G** (Scientists use cloudiness, called turbidity, to check how clean a lake is. Book 13, Question 93)
5. **B** (Sunflowers in bud follow the Sun across the sky, then stop when they bloom. Book 13, Question 16)
6. **F** (Lanterns and lampshades often use paper to make a soft glow. Book 13, Question 78)
7. **J** (Remember: "left" and "red" are both shorter words than "right" and "green." Book 13, Question 137)
8. **A** (Builders and surveyors "sight along a line" to check that things are straight, using the fact that light does not wiggle on its own. Book 13, Question 1)
9. **H** (Solar cells power satellites and space stations, too. Book 13, Question 109)
10. **E** (A peephole squeezes a whole hallway into a tiny circle. Book 13, Question 63)