

Rainbow Readers

Title: Lasers Are Not Just Lights

Word Study

Fill in the blanks using the words.

ruby	fiber	source	photons	radiation
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1. Light is made up of lots of photons.
2. Nuclear radiation is very dangerous.
3. The source of this river is a lake high up in the mountains.
4. She has a lovely ruby necklace.
5. This fiber is so thin, it's hard to see.

Reading Comprehension

A. Circle T for true or F for false.

1. Lasers are strong, thin beams of light. T / F
2. Photons are the smallest part of light. T / F
3. Lasers reduce bleeding in operations. T / F
4. Laser guns are now being used on war planes. T / F
5. Lasers are used for fun things, too, like concerts. T / F

B. Circle the correct word(s).

1. Light is made up of different (strength / color) wavelengths.
2. GPS mapping systems use (masers / lasers).
3. Lasers can be used to (make / remove) tattoos.
4. Laser printers are fast and print (carefully / clearly).
5. We now use thin fibers to send (signals / lasers) long distances.

C. Choose the best answer.

1. What does ordinary light do?

- a. It looks colorful.
- b. It spreads out.
- c. It travels in circles.
- d. It moves together in a line.

2. What can scientists do with laser lights?

- a. Make rubies
- b. Create microwaves
- c. Measure the energy in a maser
- d. Send messages to ships in space

3. Which of the following is NOT a benefit of doctors using lasers?

- a. They cure more illnesses.
- b. They are faster.
- c. They cause less pain.
- d. They make healing quicker.

4. How have lasers changed credit cards?

- a. They make them harder to copy.
- b. They allow them to be used in stores.
- c. They read the information stored on the card.
- d. They write people's names on the card.

5. Why do people have to wear glasses while using lasers?

- a. To be able to see them
- b. Because they are so bright
- c. To protect users' eyesight
- d. Because of the microwaves

Summary

Fill in the blanks with the words.

holograms	microwaves	bar codes	ordinary	atoms
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Modern life would be very different without lasers. Lasers are made of light. However, ordinary light waves get wider as they travel. Laser light remains a thin, strong beam. The idea of lasers came from studying microwaves. Someone realized that the way atoms are gathered together to make masers could be done with light. Today we use lasers for a lot of things. In medicine they are used for surgeries. They help doctors and patients work and recover faster. Lasers are also used to make us look better. They remove unwanted hair and smooth the skin. Lasers are also used to help build things. We use them to make holograms for credit cards. This makes cards harder to copy. And we use them in stores to read bar codes. Militaries use them with weapons. But lasers are dangerous. They can hurt your eyes and burn skin. Only professionals should use them, even if it's just at a concert.