

Physical Principles in Living Systems

Name:

Brainpop—Rainbows

Period:

Watch the Brainpop on rainbows, then answer the questions below. You can also use Chapter 3 of your textbook if you are getting stuck.

_____ 1. The component colors of white light have different...

- a. speeds
- b. wavelengths
- c. masses

_____ 2. What group does all light belong to?

- a. the prism
- b. the periodic table
- c. the electromagnetic spectrum

_____ 3. What do we call light we can see?

- a. the optical cluster
- b. the visible spectrum
- c. the rainbow

_____ 4. How many colors are usually named in the visible spectrum of light?

- a. five
- b. six
- c. seven

_____ 5. Which of these is easiest for humans to see?

- a. white light
- b. x-rays
- c. ultraviolet rays

_____ 6. What is it called when white light passes through a different medium and spreads into colors?

- a. refraction
- b. reflection
- c. rejection

_____ 7. What is a transparent solid object that breaks white light into colors?

- a. a windowpane
- b. a rainbow
- c. a prism

_____ 8. How do rainbows form?

- a. rainwater causes the different colors on Earth to melt
- b. the different colors in the air are heated by the sun
- c. water in the air splits white light into colors

_____ 9. Why can't you touch a rainbow?

- a. it's an optical effect, not an actual object
- b. they are formed way too high up in the air
- c. rainbows disappear when you try to touch them

_____ 10. How can you make your own rainbow?

- a. with a bunch of cans of silly string
- b. with a lawn sprinkler or hose
- c. you can't



Look at the center picture. What does it have to do with rainbows?
