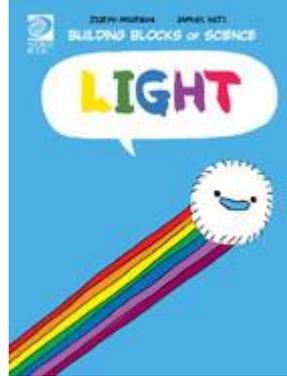


BUILDING BLOCKS OF SCIENCE!



Light Activity Sheet

1. True or False: In order to see you need light.
2. True or False: Light does not travel in a straight path.
3. Draw a diagram of how light reaches your eyes.

4. List the three things that happen to light when it hits an object.

5. Fill in the blanks:

Black objects _____ most of the light that strikes them. White objects _____ more of the light. Shiny objects _____ a lot of light. Opaque objects _____ and _____ light.

6. Why do shadows form?

7. Give an example of a transparent object and a translucent object.

8. True or False: Translucent objects let some light pass through, but only certain colours.

9. True or False: Light moves faster through water than through air.

10. What is refraction?

11. Why do objects under water not appear where they seem to be?

12. Name the colours of the rainbow, also known as the visible spectrum.

13. Fill in the blanks:

Light with _____ wavelengths are red. Light with _____ wavelengths are violet.

14. Why do we see rainbows?

15. True or False:

- a) White light is made up of all the colours of the visible spectrum.
- b) We see bananas as yellow because the colour yellow is not absorbed by bananas. It has been reflected.

16. How does wearing glasses help people see more clearly?

17. Name four examples of "invisible light".

18. Name ways that people use light.

ANSWERS:

1. True
2. False
3. See example on page 5.
4. Light is absorbed, reflected and/or can pass through the object.
5. Black objects capture most of the light that strikes them. White objects reflect more of the light. Shiny objects reflect a lot of light. Opaque objects absorb and reflect light.
6. Shadows form when an opaque object blocks the path of light.
7. Transparent: window. Translucent: stained glass window.
8. True
9. False
10. Refraction is when light bends because its speed has changed.
11. Refraction.
12. Red, Orange, Yellow, Green, Blue, Indigo, Violet
13. Light with longer wavelengths are red. Light with shorter wavelengths are violet.
14. We see rainbows when the sun shines through raindrops. Refraction bends the light through water, separating light into different colours.
15. a) True b) True
16. Glasses have lenses that bend light in a specific way.
17. Infrared waves, ultraviolet waves, radio waves, x-rays.
18. Examples of people using light: lamps, computer screens, television, internet, telescopes.