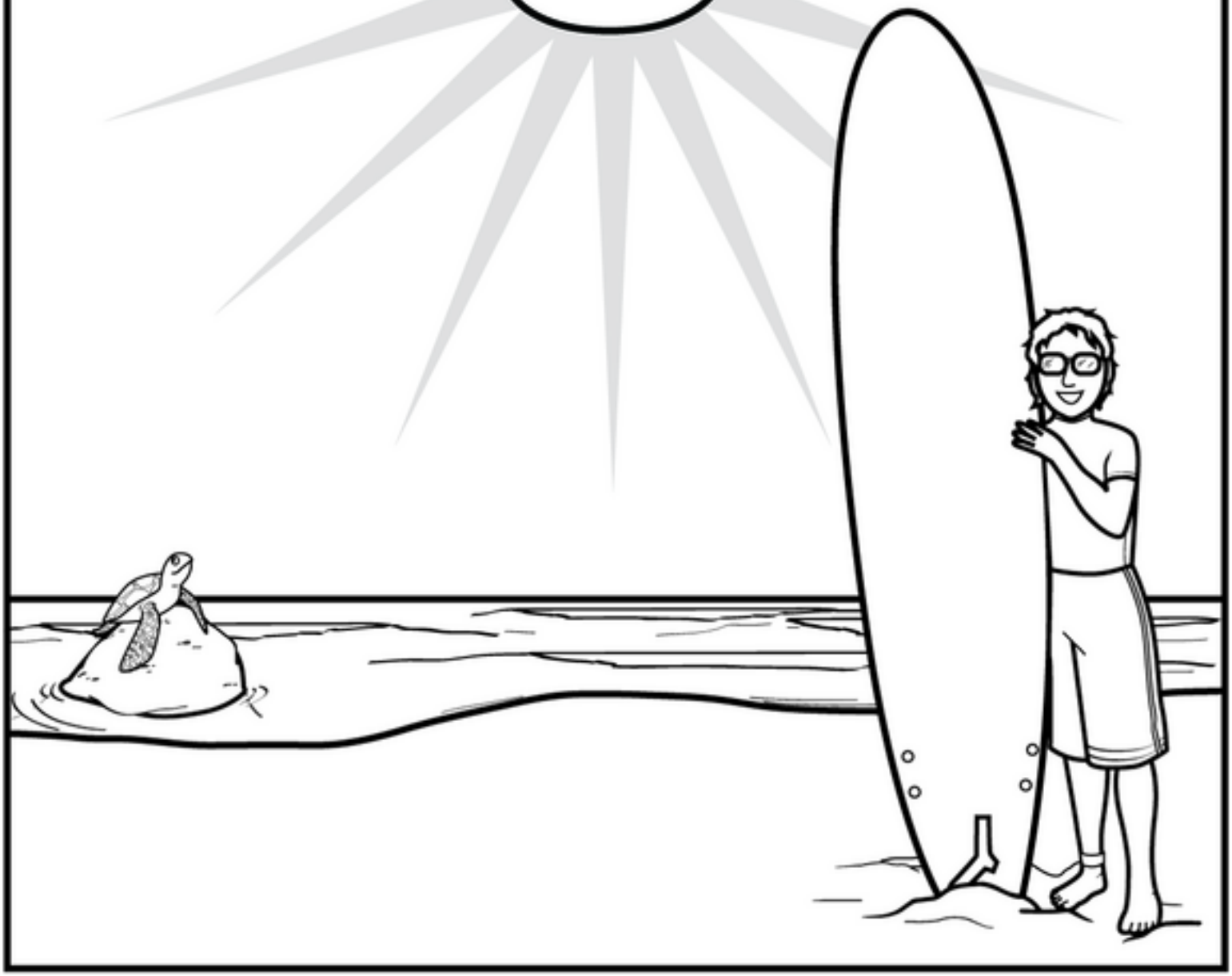
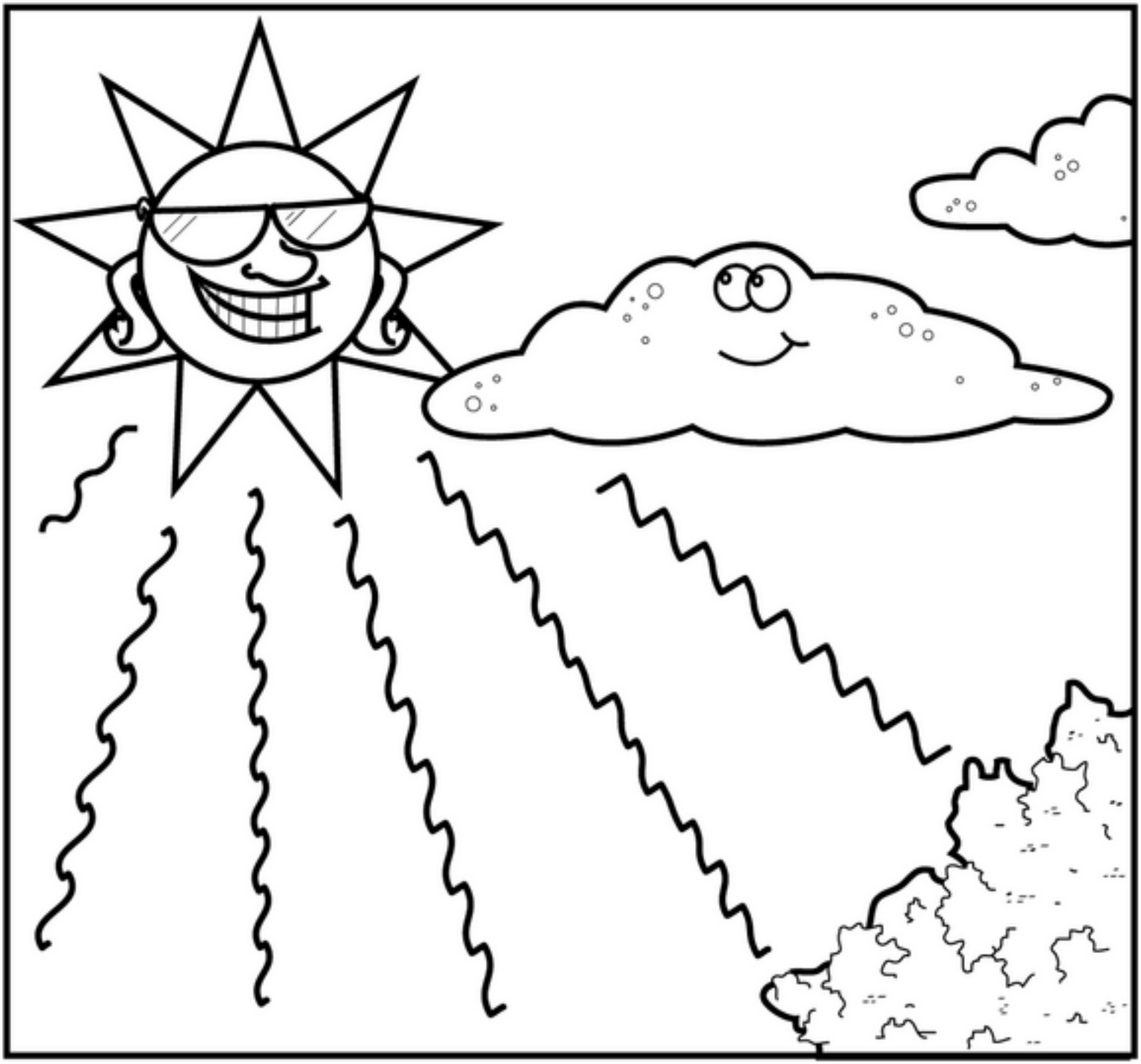
Lessons About Light





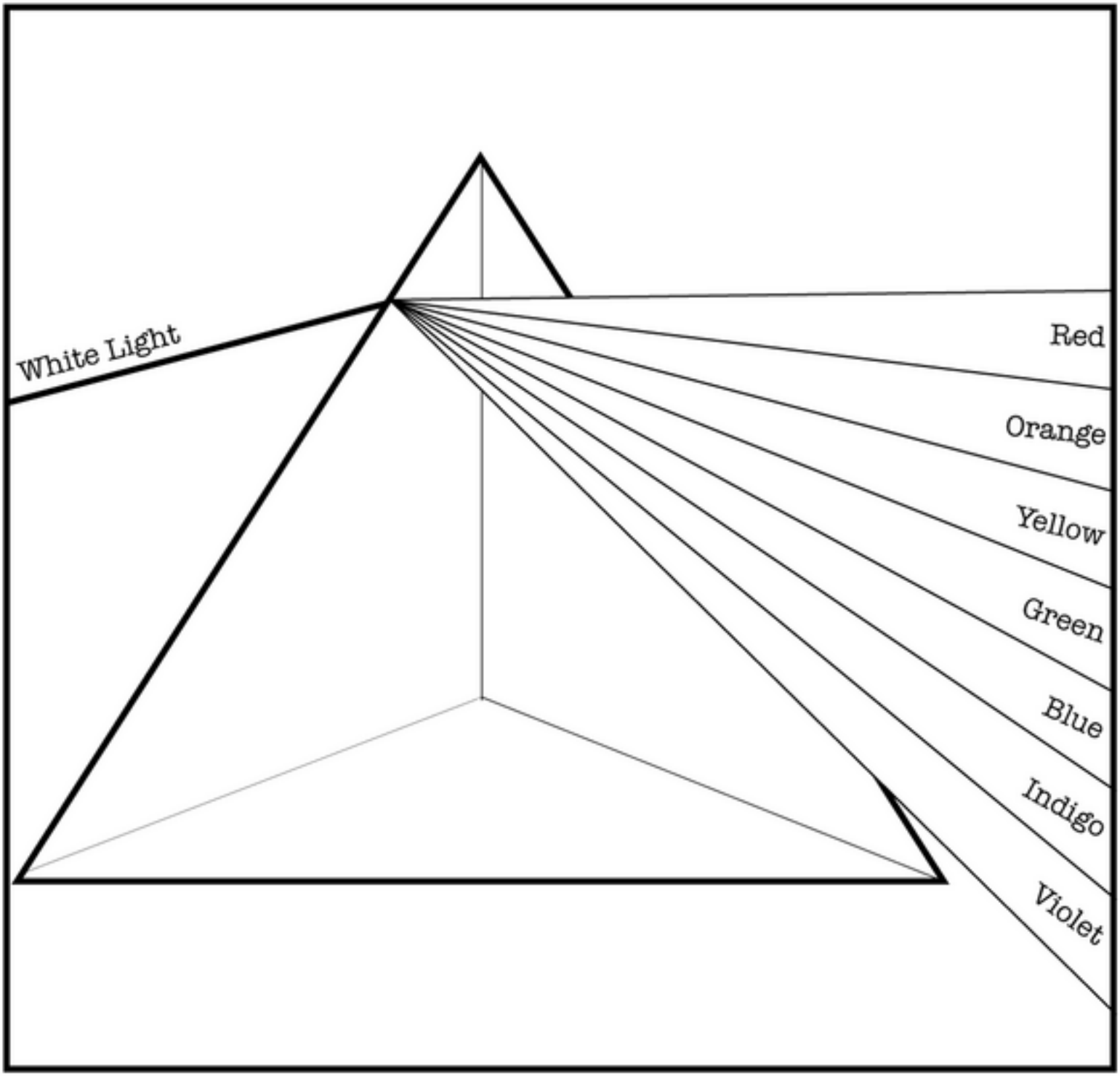
Light is a form of energy that travels in squiggly lines called waves.

When sunlight is used for doing chores, lots of energy it saves.

Light energy is magnetic and it is electrical, too.

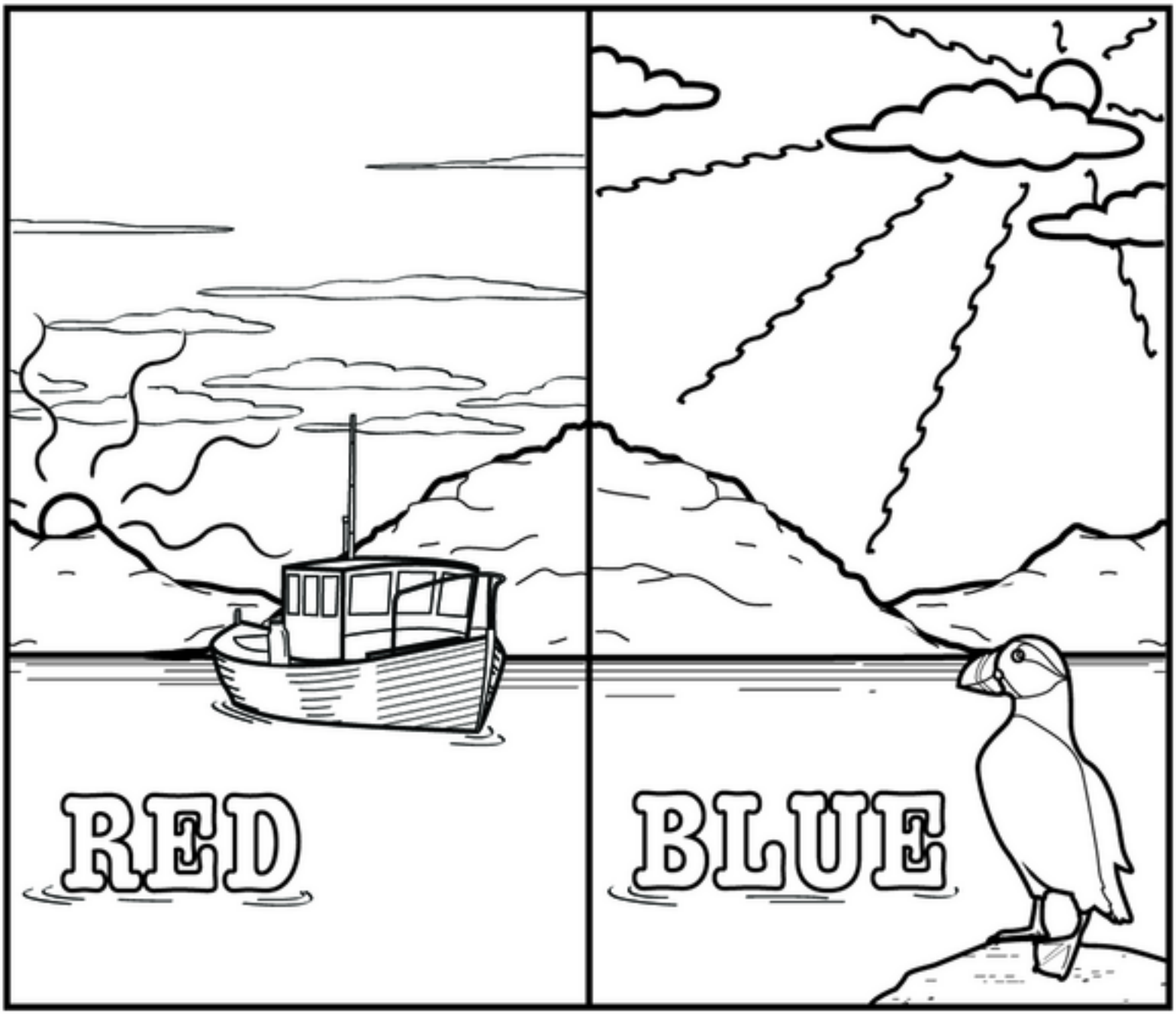
Most of these *electromagnetic* waves cannot be seen by you.

Light energy is made of tiny particles. *Photons* are what they're named.
When they group together in a wave, they make a light ray where they're aimed.
Light has several properties, that means things only light can do.
As you keep on reading, we'll list some of them for you.



The light that's seen by humans is called *visible light*. It's made of lots of colors even though it may look white.

The colors of a rainbow are the colors you would see. Each color has a different wavelength and it has different energy.

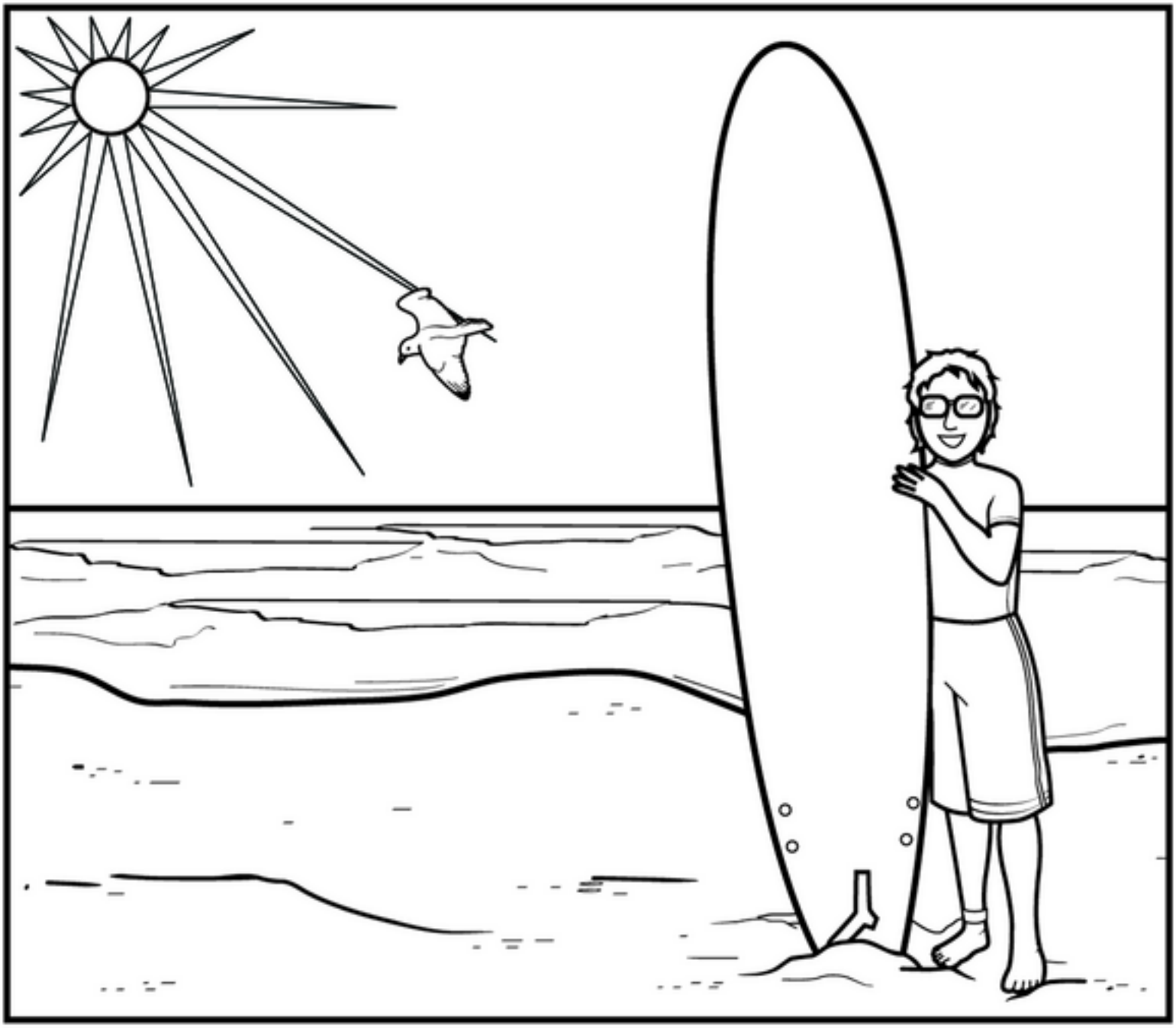


A red sky has longer wavelengths, so less energy is produced.

The light with longer wavelengths has its energy reduced.

If you're looking at blue light, like the blue up in the sky,

you are seeing shorter wavelengths and that's the reason why.

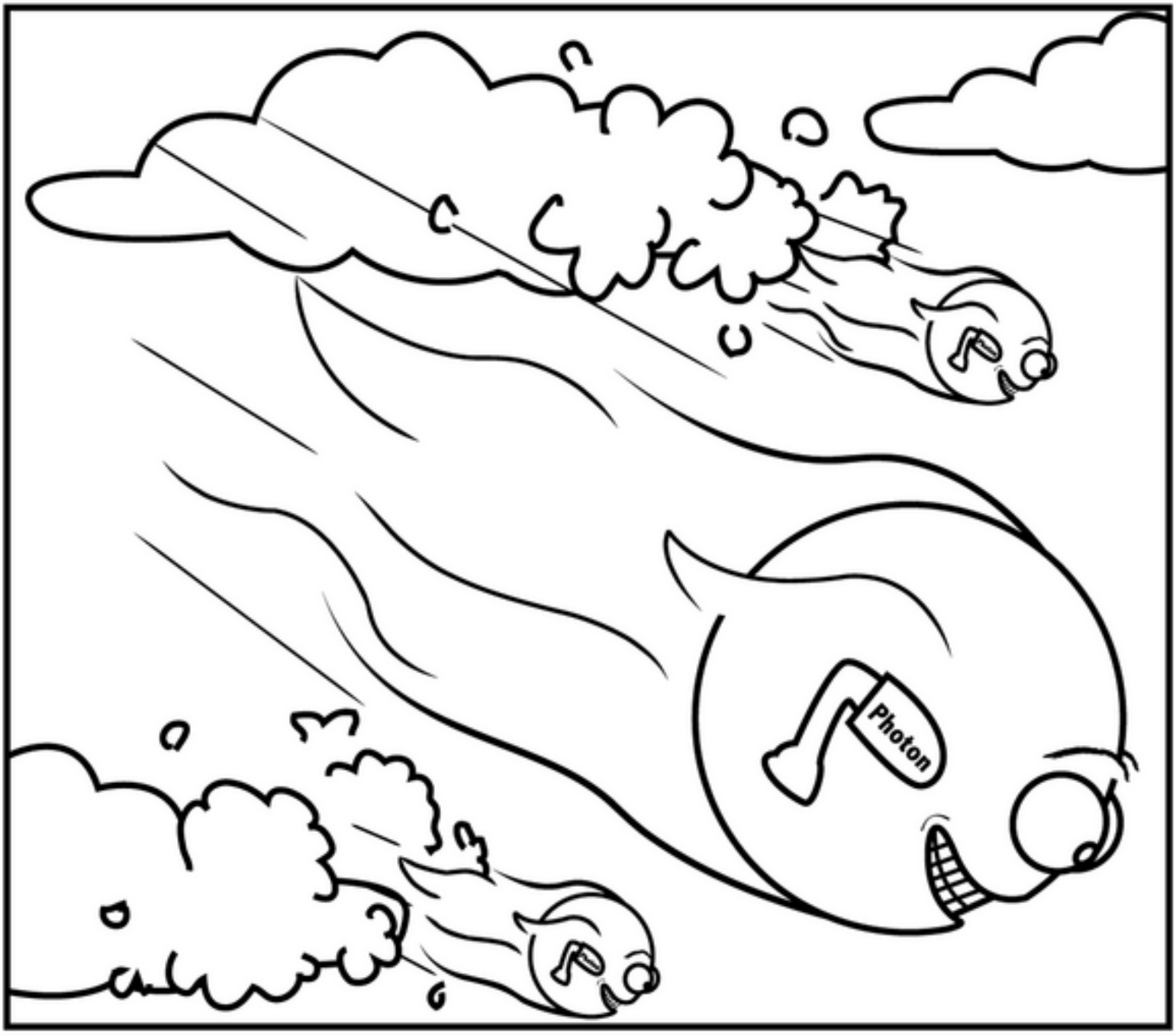


Light also travels in all directions from its primary source.

What is our primary source of light? Why, it's the sun, of course.

Light also travels in straight lines and these light lines are called *rays*.

The sun sends out its rays of light to brighten up our days.

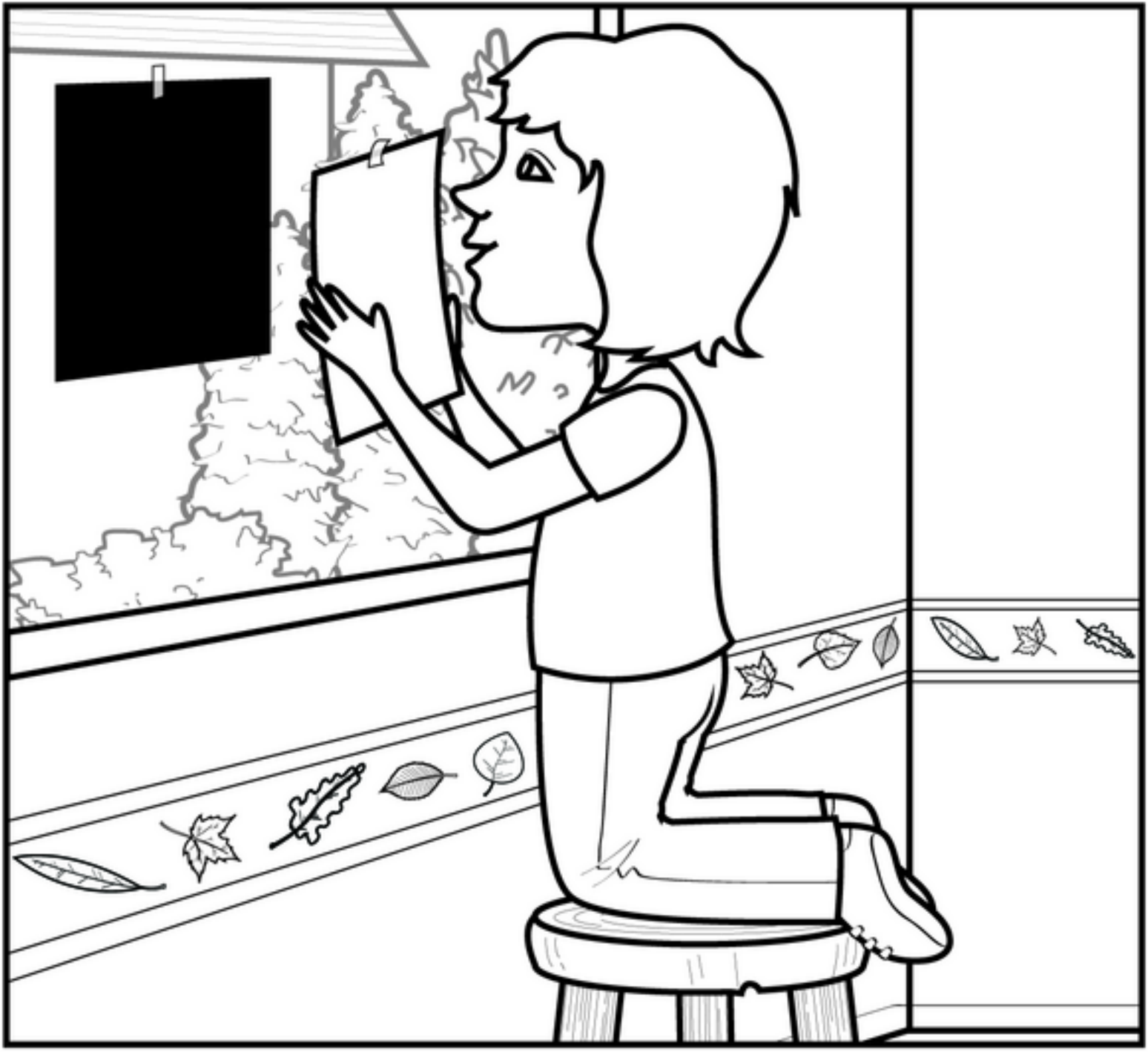


186,000 miles per second is the speed of light, we're told.

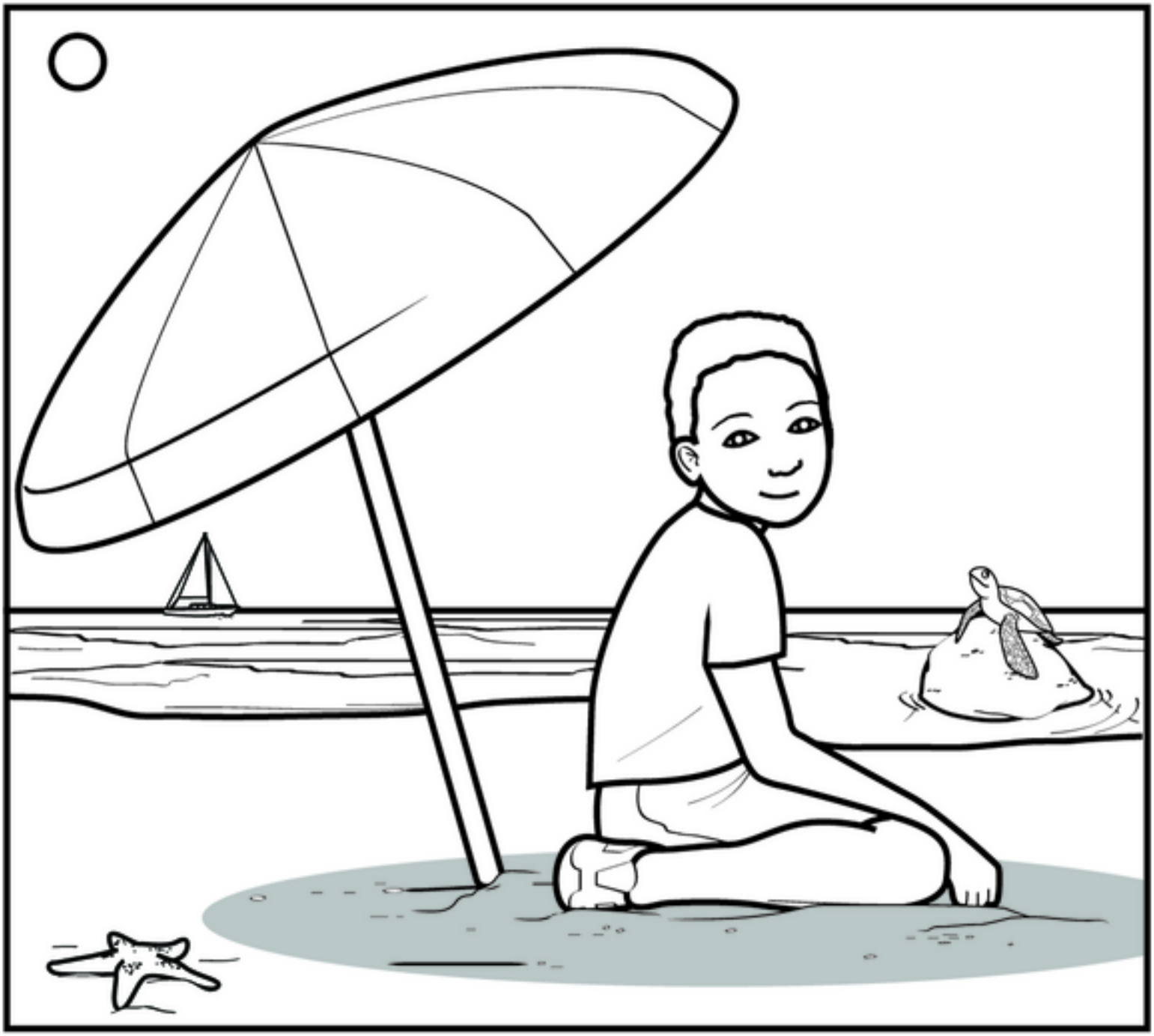
When light first leaves the blazing sun it's very hot, not cold.

Light can travel through many kinds of matter, and through a vacuum, too.

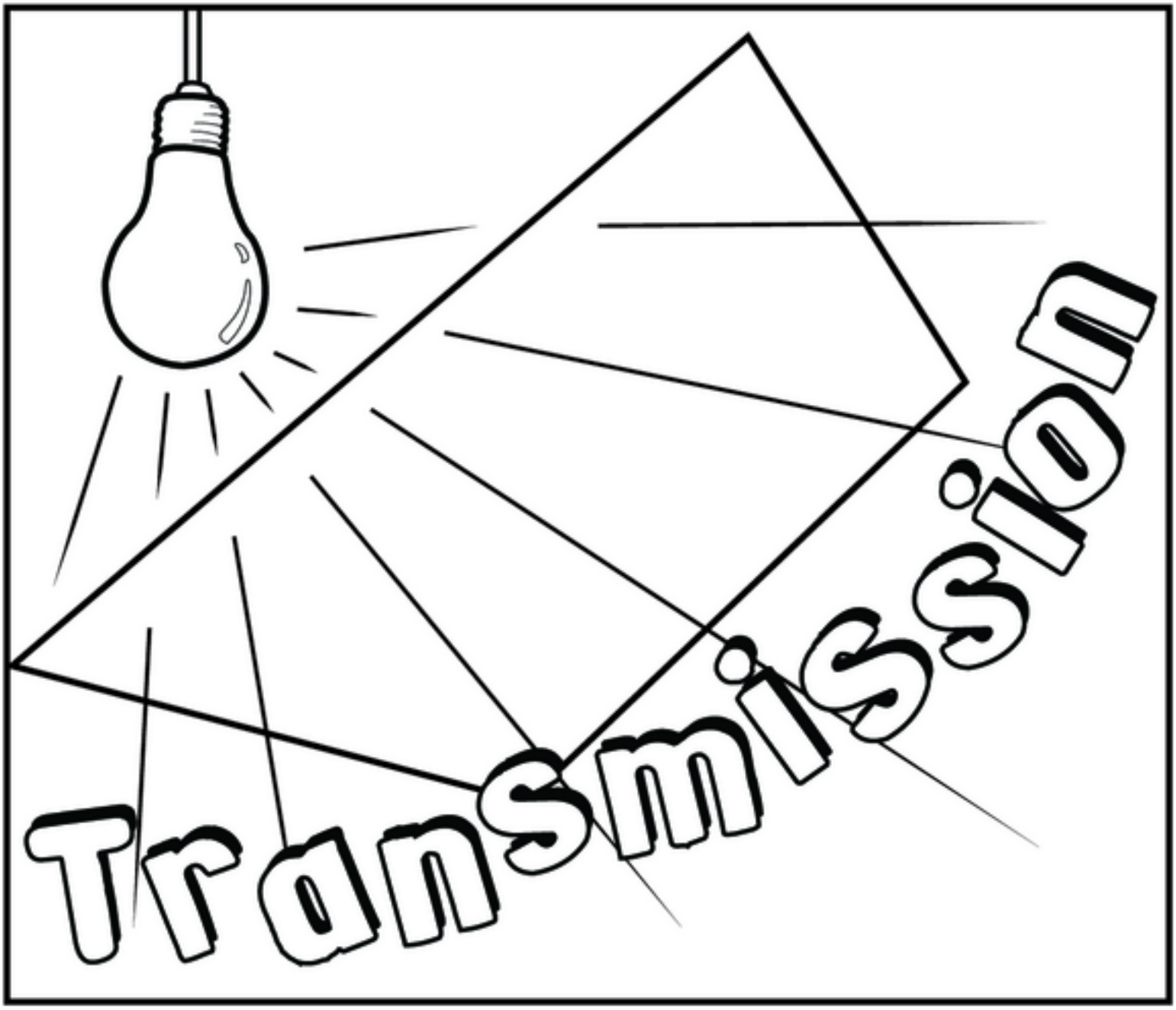
Traveling through empty space is something else light waves can do.



Light energy can be *absorbed*. Just try this little test.
Put two papers in a windowsill; one black, one white would be the best.
Put a thermometer underneath each one and leave it for a hour or so.
The black paper will absorb more light. Feel it and you will know.



Light can also be *reflected*. That means some light will bounce off, or reflect.
It bounces off at the same angle, it's a fact that has been checked.
Light can also be *refracted*. That means it can be bent when it passes through the kind of matter through which light rays can be sent.



When light passes through transparent matter, this is called *transmission*.

How much light passes through it depends on the matter's composition.

The sun lights up the world around us. Without light, nothing would grow.

We need *illumination*, or light to see the bright rainbow.

1. What is light?
    a. an electric current
    b. a form of energy
    c. an idea
    d. a chemical

Answer: _____

2. How does light travel?
    a. in straight lines
    b. in circles
    c. in random fashion
    d. in boxes

Answer: _____

3. What is light that is seen by humans called?
    a. x-rays
    b. photographs
    c. visible light
    d. infrared light

Answer: _____

4. What are light rays?
    a. lines on a drawing
    b. straight lines of light from a light source
    c. straight lines of people
    d. a direction on a map

Answer: _____

5. What is Earth's primary source of light?
    a. the stars
    b. the moon
    c. the the sun
    d. power company

Answer: _____

6. When light passes through transparent matter it is called what?
    a. commission
    b. transmission
    c. absorbing
    d. reflecting

Answer: _____