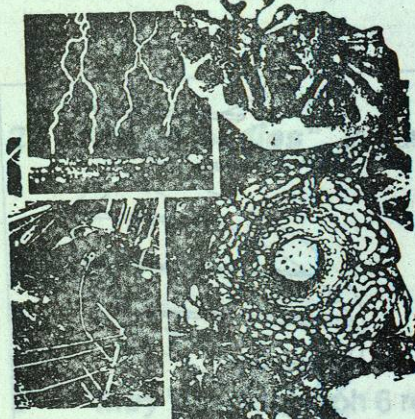


Time to read! (3)

Match the titles of the books and their corresponding table of contents.

**BOOK OF
PLANET
EARTH**



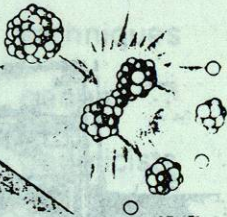
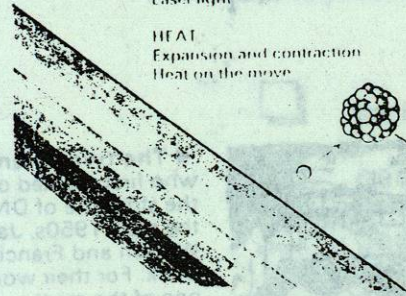
BY MARTYN BRAMWELL

THE SIMON & SCHUSTER YOUNG READERS
**BOOK OF
SCIENCE**
BY ROBIN KERFOO



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**Light and
Radiation**

Sight is perhaps the most important of our five senses. We see because our eyes are sensitive to light. During the day that light comes from the sun. Light rays are one way in which the sun gives out its energy. But it gives off energy in radiation (rays) of many other kinds as well—gamma rays, X rays, ultraviolet rays, infrared rays, microwaves and radio waves. Light and all these other rays are basically very similar. They belong to a family of rays called electromagnetic radiation. This radiation is so called because it consists of vibrating electric and magnetic waves. Unlike sound waves and water waves, electromagnetic waves need no medium (a solid, liquid or gas) to travel in. That is why they can reach the earth across space.

The various kinds of rays differ from one another in their wavelength, the distance between the crest of one wave and the next. Light itself is not a single wavelength, but a mixture of wavelengths. When we split it up into its separate wavelengths, we find that each is a separate color—one of the colors of the rainbow.

Light travels through some substances, such as glass and water, and is reflected by others, such as shiny metal. When it passes into glass or water, it is bent, or refracted. We make many useful instruments by using the properties of reflection and refraction. They include telescopes, microscopes and cameras. Telescopes enable us to see objects in the heavens whose light has taken billions of years to reach us. Microscopes enable us to see objects thousands of times smaller than a pinhead. Cameras can freeze the motion of a bullet in midair.

Task 1

Put a tick (✓) or a cross (✗) to show whether these statements are right or wrong.

- | | R | W |
|--|--------------------------|--------------------------|
| 1 Sound waves need a medium to travel in. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 The sun gives out its energy in light rays. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 Light travels through any substance. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 Light is a mixture of wavelengths. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 Electromagnetic radiation consists of vibrating electric and magnetic waves. | <input type="checkbox"/> | <input type="checkbox"/> |

Task 2

According to the text, answer these questions.

- 1 Which word replaces *the sun* (line 3) in line 4? _____
- 2 Which word replaces *gamma rays, X rays, ultraviolet rays, infrared rays, microwaves and radio waves* (line 5-6) in line 7? _____
- 3 Which word replaces *electromagnetic radiation* (line 7) in line 8? _____
- 4 Which word replaces *electromagnetic waves* (line 9-10) in line 11? _____
- 5 Which word replaces *Light* (line 17) in line 18? _____
- 6 Which word replaces *Instruments* (line 20) in line 20? _____

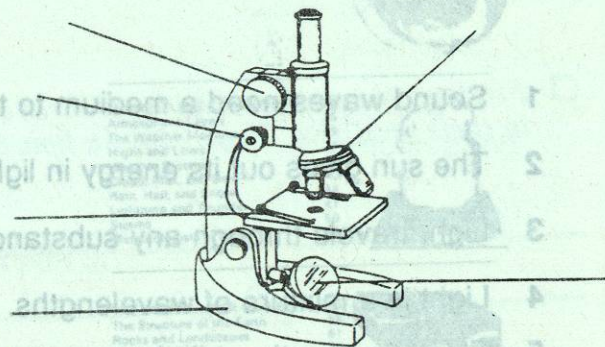
Task 3

Complete the table

Objects	Functions
Telescope	
Cameras	
Microscopes	

Label the parts of the microscope shown in the drawing below. Use words from the box.

- Coarse adjustment
- Mirror
- Revolving nose piece
- Base
- Stage clips
- Fine adjustment



You can consult your Biology teacher !

Skill : Guessing Meaning from context

Task 1

Read the text and say what is the moral of the story.

A country girl was walking along the **snerd** with a **roggle** of milk on her head. She began saying to herself. 'The money for which I will sell this milk will make me enough to increase my **trund** of eggs to three hundred. These eggs will produce the same number of chickens, and I will be able to sell the chickens for a large **wonk** of money . Before long, I will have enough money to live a rich and **fallentious** life. All the young men will want to marry me. But I will refuse them all with a **ribble** of the head, like this ...'

And as she **ribbled** her head, the **roggle** fell to the ground and all the milk ran in a white stream along the **snerd**, carrying her plans with it.

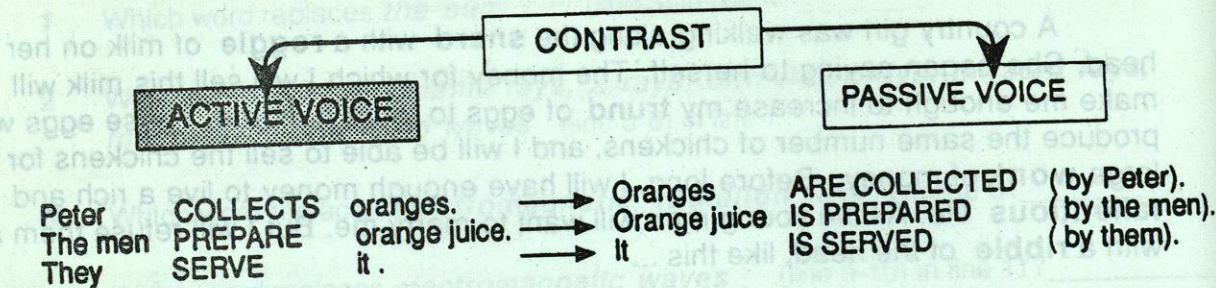
Write the moral of the story.

Write an equivalent in Spanish

- 1 Snerd _____
- 2 Roggle _____
- 3 Trund _____
- 4 Wonk _____
- 5 Fallentious _____
- 6 Ribble _____

Clearing it up

With the purpose of understanding the verbs in passive voice, it is convenient to contrast in both active and passive.



When is the Passive Voice mostly used?

a) When the object is more important than the subject.



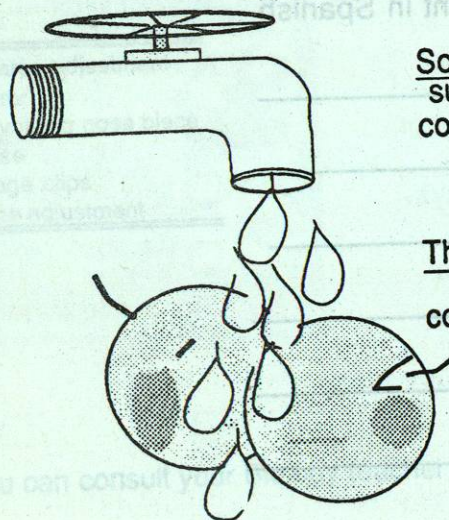
Example:

These chemical substances burn my skin. (ACTIVE)
OBJECT

My skin is burned by these chemical substances. (PASSIVE)
OBJECT

b) When the subject is not known.

Example:



Someone washes the oranges at the "Montemorelos" company. (ACTIVE)
SUBJECT OBJECTS

The oranges are washed at the "Montemorelos" company. (PASSIVE)

PASSIVE VOICE CHART (Present Tense)

I	am	assistED visitED helpED HURT SEEN
You We They	are	
He She It	is	
SUBJECT + VERB TO BE + PAST PARTICIPLE FORMS.		

This structure can be used in any other tenses by changing the verb **TO BE (am-are-is)** into the tenses you want.

After analyzing the chart with your teacher, form small sentences orally for yourself (or in choral repetition).

Example:

I am visited by my friends on Sundays.
 We are helped by the teacher in class.

Task 2

Read the following sentences and classify them as **ACTIVE** or **PASSIVE**

1. We visit the laboratories.
2. The laboratories are visited everyday.
3. I assist my team.
4. My team is assisted efficiently.
5. My classmates see the particles.
6. The particles are seen clearly.

Task 3

Looking up the "Passive Voice Chart," complete the following sentences to form Passive Voice sentences.

1. The boys visit the laboratory everyday.
 The laboratory _____ by _____ everyday.
2. The teachers assist the students at the laboratory.
 The students _____ by _____ at the laboratory.
3. The students see the experiment.
 The _____ is _____ by _____.
4. This acid hurts my skin.
 My _____ by this _____.
5. Dr. Jones helps me in the event.
 I _____ by _____ in this event.