Read the following text:

Why Is the Sky Blue?

It's easy to see that the sky is blue. But have you ever wondered why? The light from the Sun looks white even though the light is actually a combination of all the colors of the rainbow. When white light shines through a specially shaped crystal called a prism, and the light you see is just one tiny bit of all the kinds of light energy beaming around the universe and around you!

The sky is blue because of a phenomenon called Raleigh scattering which is the distribution of electromagnetic radiation (of which light is a form) by particles of much smaller wavelengths. The particles of the atmosphere scatter sunlight, and what filters down to earth is called diffuse sky radiation.

Although only about 1/3rd of light is scattered. The smallest wavelengths of light, which correspond to blue hues, tend to scatter easier and that is we see a blue sky. As the Sun gets lower in the sky, its light passes through more atmosphere to reach us and even more of the blue light is scattered. This allows the reds and yellows to pass straight through to your eyes.

Interestingly, the ocean is not blue because it reflects the sky. Water actually appears blue because of its absorption of red light. When light hits water, the water's molecules absorb some photons from the light. In shallow bodies of water (like a drinking glass) light penetrates it completely, as there is not enough water to absorb enough photons, so we see the water as colorless. In deeper waters however, not all the wavelengths of light can fully penetrate the liquid, as there are too many water molecules in the way of the photons. The water molecules absorb

all the red wavelengths from the light, making it reflect blue. This is also why shallower waters appear 'less' or lighter blue than deeper ones- less absorption means less reflection.

Reading Comprehension

Answer the following questions about the text:

Mark "True" or "False" next to each sentence:

1. The sun's light is made of several colors
2. A prism is made of light
3. The color blue is a form of electromagnetic radiation
4. The smallest wavelengths of light scatter more easily
5. All oceans and seas reflect the color of the sky
6. We see red water as colorless
7. Deep water look darker than shallow water

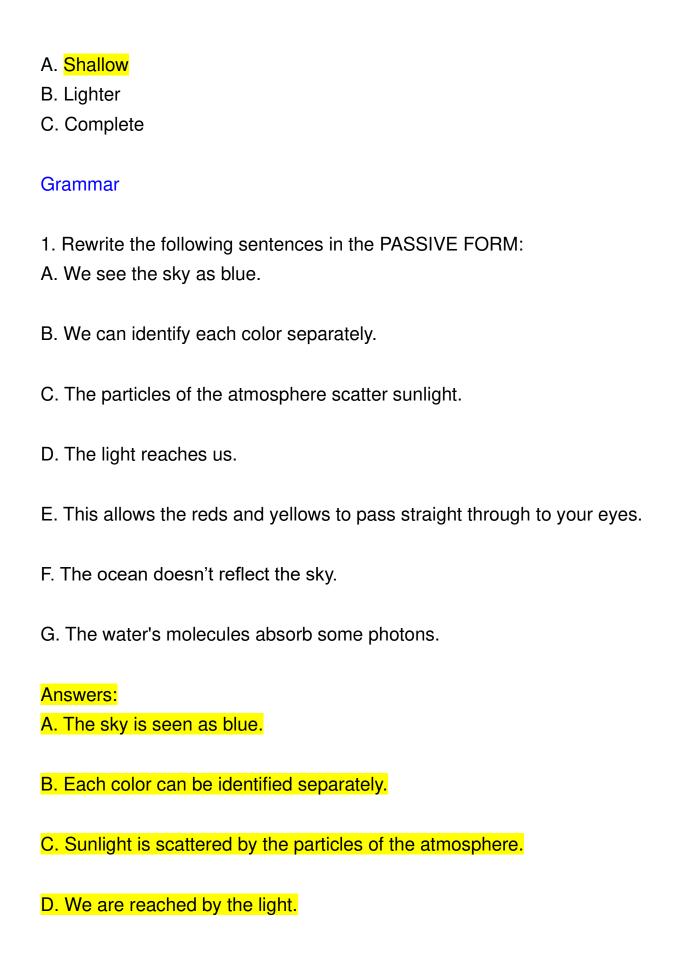
Answers:

- 1. True
- 2. False
- 3. False
- 4. True
- 5. False
- 6. False
- 7. True

Vocabulary

6. What is the opposite of "deep"?

Vocabulary
1. What does "to wonder" mean?
A. To be curious about something
B. To explain a difficult matter
C. To walk from place to place
2. Fill in the missing words:
"The light from the Sun looks white the light is actually a combination o
all the colors of the rainbow."
A. as a result of
B. despite the fact that
C. nevertheless
3. What is the opposite of "separately"?
A. Undoubtedly
B. Together
C. Beaming
4. Which word in paragraph 2 means "something that happens"?
A. atmosphere
B. wavelengths
C. Phenomenon
5. Which verb means the same as "to enter"?
A. To penetrate
B. To absorb
C. To reflect



E. The reds and yellows are allowed to pass straight through to your eyes.
F. The sky is not reflected by the ocean.
G. Some photons are absorbed by the water's molecules.
2. Fill in the missing words with either the GERUND or INFINITIVE form of the verb in brackets:
A. I keep (to wonder) about the color of the sky.
B. The students enjoy (to learn) about this special phenomenon.
C. They learned (to use) a prism.
D. The scientists finished (to measure) wavelengths.
E. The water managed (to absorb) the light.
F. I volunteered (to take part) in the experiment.
G. The teacher felt like (to explain) the subject in a funny way.
Answers:
A. I keep wondering about the color of the sky.
B. The students enjoy learning about this special phenomenon.
C. They learned to use a prism.

- D. The scientists finished measuring wavelengths.
- E. The water managed to absorb the light.
- F. I volunteered to take part in the experiment.
- G. The teacher felt like explaining the subject in a funny way.