



12✘ Information referenced from: [Newton and the Color Spectrum](#)

What are your thoughts on color?

Let's say I ask you, what are your thoughts on color? Or, if someone **(A) (are, is, was, were)** to say the word “color” to you, what would come to your mind? Would you think about your favorite color? Would you think about a rainbow, a pretty flower, or a lesson on “color” in a kid’s TV show that you watched when you were little? What else would you think about?

Most people would agree that color is very important in their life. Color makes many things, such as flowers and paintings, look beautiful. Color makes many things, such as movies and television, fun to see. Color is even used to keep people **(B) (safe, safety)**! For example, colors on traffic lights help people be careful when they are driving. Bright-colored clothing on bicycle riders makes it easier for car drivers and **pedestrians** to see them. What are some other reasons **(C) (how, what, which, why)** color is important?

For many years, people thought that things looked colorful because they had “color” in them in the first place. Around the 1700s, however, a curious scientist named Sir Issac Newton proved that things looked colorful because of the way light reflects them. But in order to understand this, it is important to know something about what makes up light.

Newton conducted an experiment where he held a **(D) (peace, piece)** of glass called a prism up to a window through which sunlight was shining. Sunlight is often thought of as white light. As he did this, he looked across the room. There he saw that the prism had bent the light into seven parts. Each part was a different color.

Then he held **(E) (another, other, the other)** prism in the path of the light which traveled from the first prism. When he looked across the room, he no longer



saw the seven colors. Newton found that the second prism had bent the light so that the colors mixed together. When the colors were mixed, they formed a white light. **(F) (It, That, There, What)** was then that he realized that what he just found made up a band of side-by-side colors. This band is called a spectrum. The colors of the spectrum are red, orange, yellow, green, blue, indigo, and violet.

Questions:

1. For **(1)(2)(3)(4)(5)** and **(6)** in the passage above, select the correct wording out of the choices listed in the parentheses and write them below.

A. (are / is / was / were)

B. (safe / safety)

C. (how / what / which / why)

D. (peace / piece)

E. (another / other / the other)

F. (It / That / There / What)

2. What do most people think about color?



3. In what ways does color keep people safe? You can choose multiple answers.

- A. It makes flowers and paintings look beautiful.
- B. It makes car drivers be careful through traffic lights
- C. Color is very important in many peoples' lives
- D. It helps car drivers and pedestrians see bicycle riders better
- E. A scientist thought that things looked colorful because of the way lights reflect them.

Your answer: _____

4. Who thought that color is caused because of the reflection of light, and experimented with prisms to find the color spectrum in the 1700s?

5. How did people think about color before the findings of the person stated in your previous answer?

- A. People thought that light reflected objects which make up color.
- B. People thought that color was important for car drivers, bicycle riders and pedestrians.
- C. People thought that color is a main topic discussed in kid's TV shows.
- D. People thought that objects had "color" in them in the first place.

Your answer: _____



6. Sort the choices in order by how the experiment was done.
- A. He held the second prism in the path of light which traveled from the first prism.
 - B. He found a band of side-by-side colors.
 - C. He held a prism up to a window through which sunlight was shining.
 - D. He looked across the room, and saw that the prism bent the light into seven colors
 - E. He looked across the room, and he didn't see the seven colors anymore.

1st step	
2nd step	
3rd step	
4th step	
5th step	

7. List the colors in the color spectrum.

~ Questions end here ~



ANSWER KEY:

1. For (1)(2)(3)(4)(5)and (6) in the reading above, select the correct wording out of the choices listed in the parentheses and write them below.

A. (are / is / was / were)

were

B. (safe / safety)

safe

C. (how / what / which / why)

why

D. (peace / piece)

piece

E. (another / other / the other)

another

F. (It / That / There / What)

It

2. What do most people think about color?

Most people think that color is important in their life.

3. In what ways does color keep people safe? You can choose multiple answers.

A. It makes flowers and paintings look beautiful.

B. It makes car drivers be careful through traffic lights

C. Color is very important in many peoples' lives

D. It makes car drivers and pedestrians easier see bicycle riders



- E. A scientist thought that things looked colorful because of the way lights reflect them.

Your answer: B, D

4. Who thought that color is caused because of the reflection of light, and experimented with prisms to find the color spectrum in the 1700s?

 Sir Isaac Newton

5. How did people think about color before the findings of the person stated in your previous question?

- A. People thought that light reflected objects which make up color.
- B. People thought that color was important for car drivers, bicycle riders and pedestrians.
- C. People thought that color is a main topic discussed in kid's TV shows.
- D. People thought that objects had "color" in them in the first place.

Your answer: D

6. Sort the choices in order by how the experiment was done.

- A. He held the second prism in the path of light which traveled from the first prism.
- B. He found a band of side-by-side colors.
- C. He held a prism up to a window through which sunlight was shining.
- D. He looked across the room, and saw that the prism bent the light into seven colors
- E. He looked across the room, and he didn't see the seven colors anymore.



1st step	C
2nd step	D
3rd step	A
4th step	E
5th step	B

7. List the colors in the color spectrum.

Red, orange, yellow, green, blue, indigo, and violet