

COLOUR

A) Introduction

1. What's the missing letter?

$$R + Y = O \quad Y + B = G \quad B + R = ?$$

2. What's a prism?

3. Can you name the two verbs below?



B) Reading

Imagine the year is 1666 and we can see a student. His name is Isaac Newton and he goes to Cambridge University. But he isn't at university now, he's at home with his family. The university is closed because of the plague, everyone is afraid of being sick.

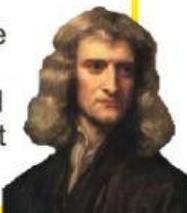
Isaac Newton continues to study at home. He enjoys physics and thinking about the mysteries of the world. On a day when there is rain and sun at the same time he sees a beautiful rainbow in the sky. It has many different colours, he is told that there are five. Newton wants to have his own rainbow because he wants to look at it closely. He decides to do an experiment. On a sunny day he goes inside a small room and he makes the room very dark. Then he makes a **small hole** and

the **sun** comes inside, it's a **small ray of light**. It's white. Newton takes **a prism** and holds it up to the light. The ray of light goes through the prism, but it isn't white now – there are many colours. The prism has split up the white light into different colours: Newton has a **rainbow**.

Newton looks at his rainbow carefully. He can see more than five colours, he can see seven. He says the colours are: red, orange, yellow, green, blue, indigo and violet.

But Newton is a scientist and he's always very interested in how things work. He has his rainbow but he wants to know more. So he takes **another prism** and holds it up to the rainbow. The rainbow goes through the second prism, but it isn't colourful now – it's white again. The prism has joined up the colours back into **white light**. Newton is the first person to understand that light is a combination of all the rainbow colours together.

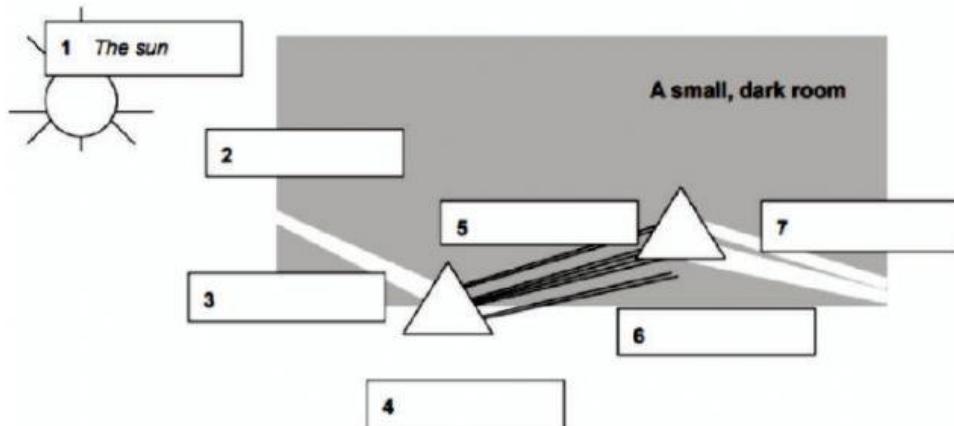
Newton also understands how we can see colour. Imagine a leaf in the sunshine. All the rainbow colours fall on the leaf but it absorbs all these colours. The only colour that is reflected is green, so the leaf looks green. Different objects reflect different colours. And perhaps Newton's favourite fruit is an orange – but what came first, the name of the fruit or the name of the colour?



4. Read about Newton and decide which is the best summary of the reading:

- Newton discovers the rainbow
- Newton discovers more colours
- Newton discovers that rainbow colours together make white light

5. How does the experiment work? Read about his experiment again and label the following diagram (you need to use the highlighted words)



6. Light and rainbows were a mystery 400 years ago. What else was a mystery?

7. What is the answer to the question at the end of the reading?

C) Reading 2

1. Complete each category with things that are *orange*.

- a. animals:
- b. Things in nature
- c. food

2. Read the following poem. Are these ideas similar to yours?

Orange is...

The tiger in the jungle
The giraffe slowly walking
The ginger cat at night looking for mice

The evening summer sun
The warm fire in the winter
The leaves falling from autumn trees

The sweet mango and soft peach
The hot carrot soup for lunch
The marmalade on toast in the morning

YOUR TURN!

Modifying a noun:

Read again and notice the extra information modifying the nouns (**evening** sun, tiger **in the jungle**, **sweet** mango and **soft** peach, etc)