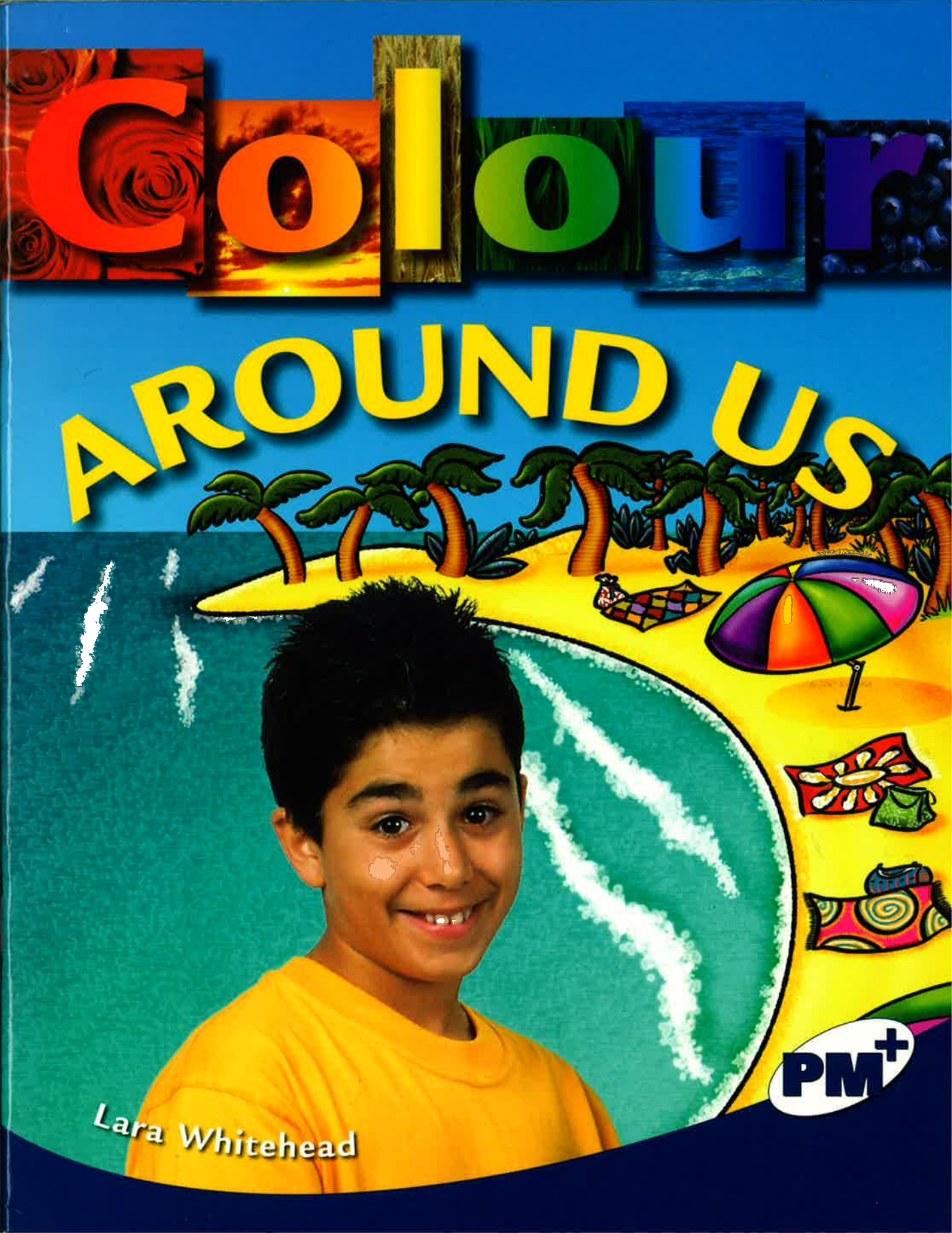
Colour

AROUND US



Lara Whitehead

PM+

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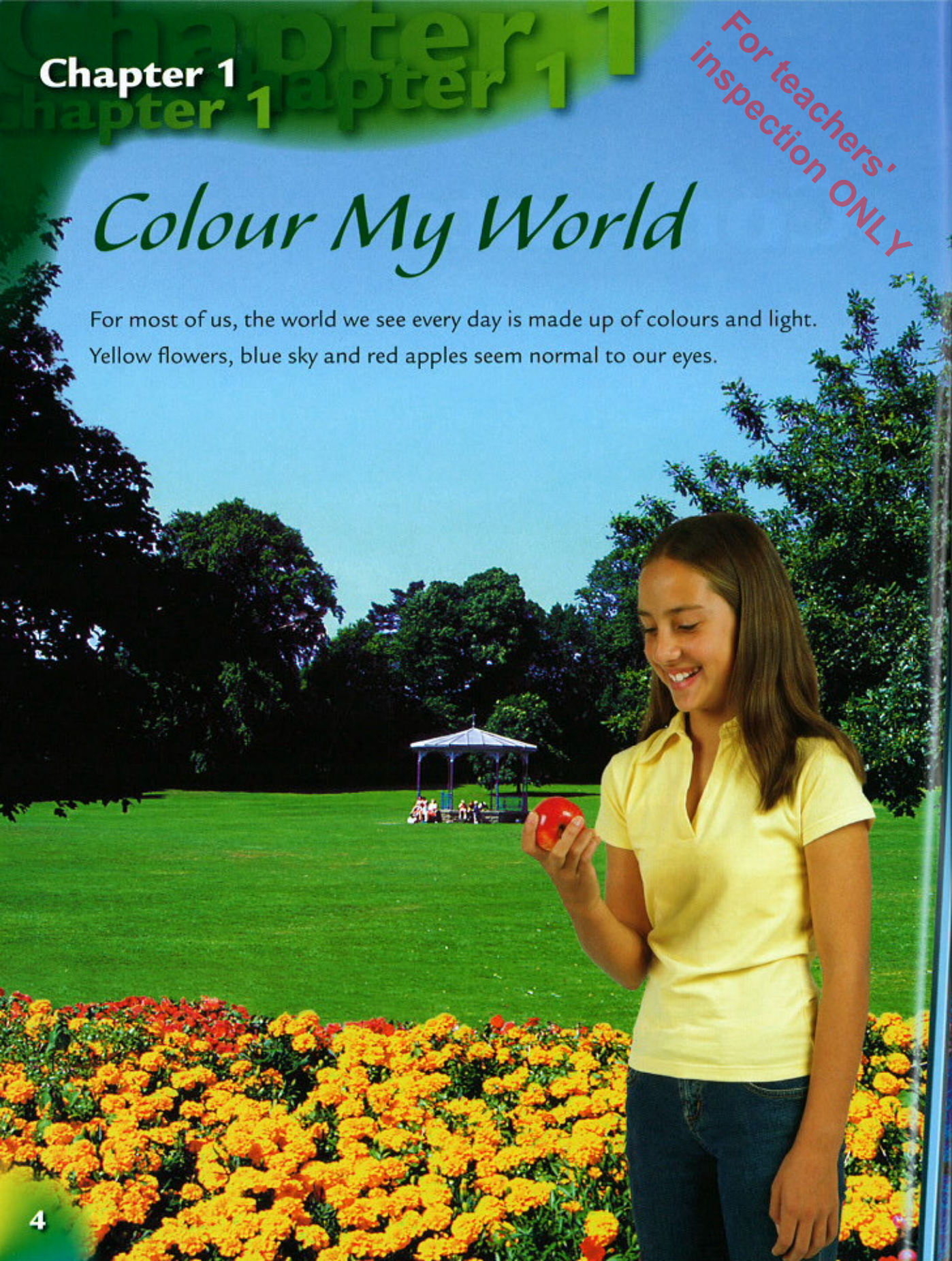
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Chapter 1

Colour My World

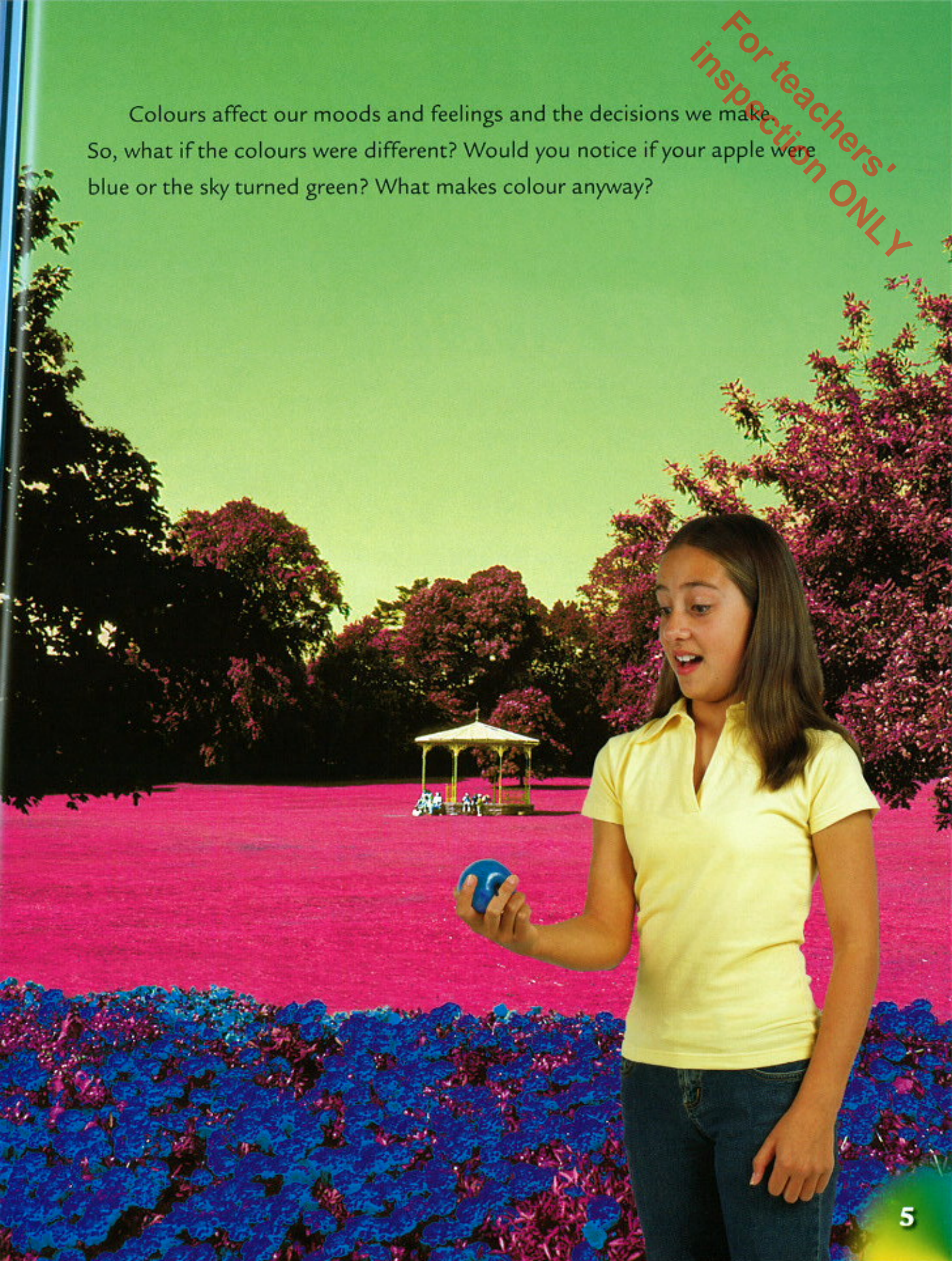
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For most of us, the world we see every day is made up of colours and light. Yellow flowers, blue sky and red apples seem normal to our eyes.



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Colours affect our moods and feelings and the decisions we make. So, what if the colours were different? Would you notice if your apple were blue or the sky turned green? What makes colour anyway?



Chapter 2

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Discovering Hidden Colours

Sunlight is around us every day. We don't notice it because it seems invisible. It's hard to believe, then, that hidden inside every ray of sunlight is a rainbow of colours.

The first person to discover this was the English scientist Sir Isaac Newton. Newton was born in 1642 and died in 1727. When he was twenty-five years old, he started experimenting with beams of sunlight coming in through his windows.

Did You Know?

As a young man Newton made three of the most important discoveries in the history of science — and all within eighteen months. Along with his discoveries of light and colour, Newton created the theory of gravity and invented a new type of mathematics, called calculus.

The London News

August 15, 1666

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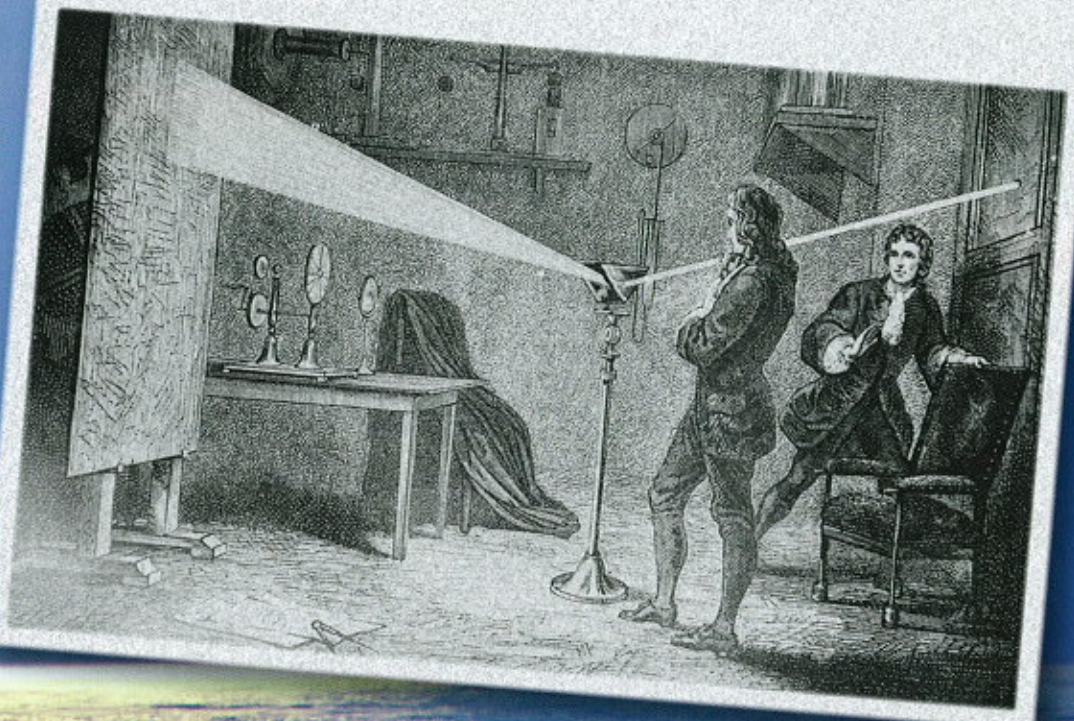
Newton Discovers Fabulous Colours in Light!

Fabulous colours are hiding in ordinary sunlight, according to the young scientist Isaac Newton. A few months ago, Newton left his teaching job at Cambridge University and returned to his home in the country, where he started doing some experiments.

One day Newton closed the curtains in his room and shut out all of the light except for a small sunbeam that was coming through a crack. Next he held up a piece of cut glass, called a **prism**. Newton moved the prism so that the beam of light shone through it. Instantly a rainbow of colours appeared on the opposite wall.

As he turned the prism, the band of little rainbow colours moved too. Newton had **splintered** the white light into seven separate colours.

Newton continued with his experiments. He tried to make just one of the rainbow colours — red — pass through a second prism. He wanted to see if red was made up of any other colours, too. It wasn't. No matter which colour he tried, none of the rainbow colours would splinter any more. With these experiments Newton now claims that the colours are in the white light itself, and are not produced by the prism.



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The colours of the spectrum

Spectrum is the name given to the band of colours that make up white light. The colours of the spectrum are red, orange, yellow, green, blue, indigo and violet.

This is how Newton's experiment works.

White light shines through a prism, and is splintered into the colours of the spectrum.

