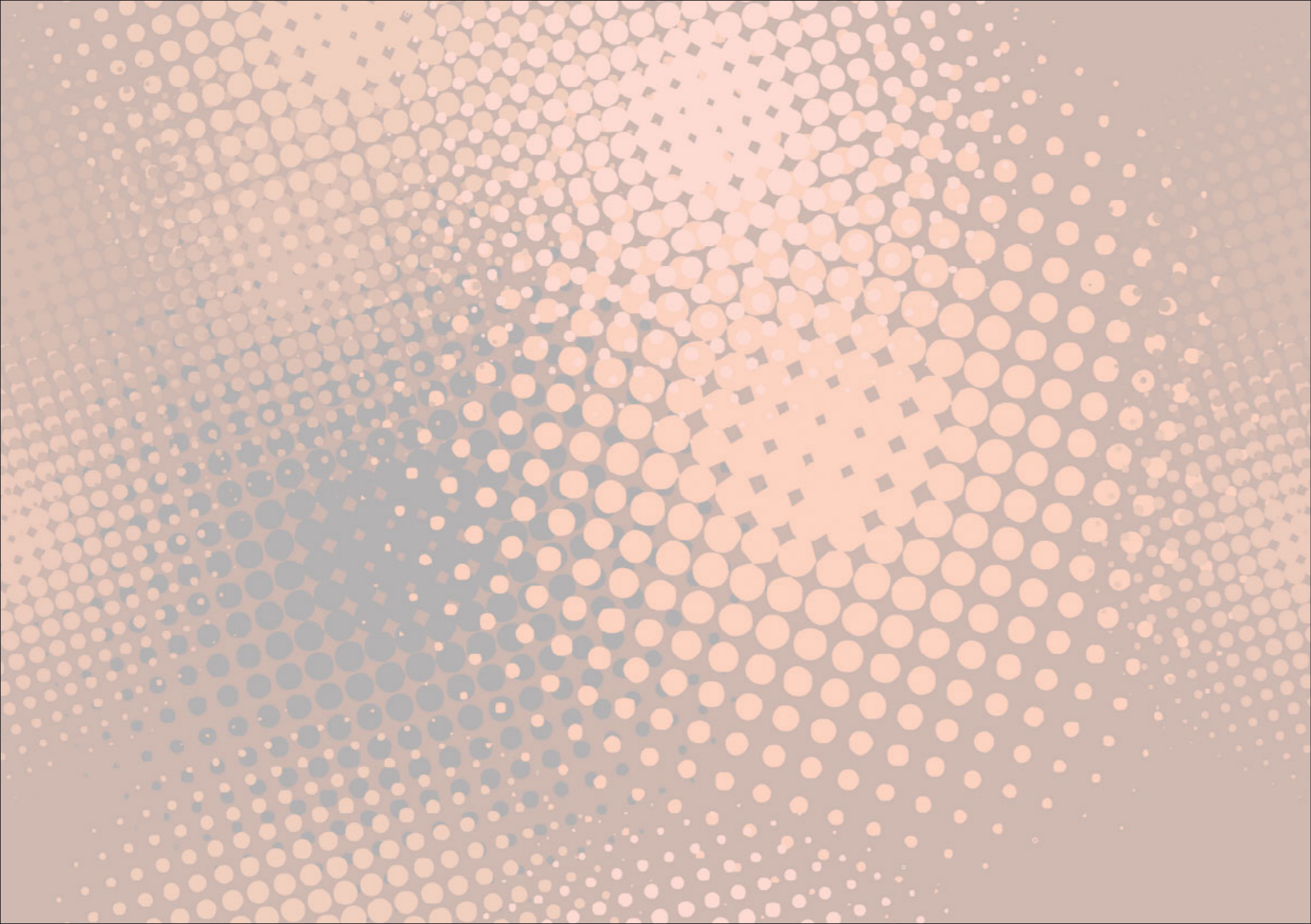


Dotted colour

Resene

the paint the professionals use



Dotted colour

Television and computer screen colours work differently to paint colours. Instead of having red, blue and yellow as the primary colours, the primary colours are red, blue and green. This is because the screens work with coloured light rather than paints to get their colours.

The inside of a television screen is coated with many dots of phosphors arranged into groups of red, green and blue. Information is transmitted to a television screen and then displayed as a picture using a series of coloured dots on the screen. Watching the television from the normal viewing distance, the colours merge together and our eyes see the normal picture.

However if you sit up very close to a television screen you can see that each picture is made up of many tiny coloured dots of colour. To get a different picture, the pattern of the dots changes and our eyes adjust to merge the new dots together to create the new picture.

Computer screens work the same way. When Resene creates electronic colour formulations for its Resene EzyPaint virtual painting software, each colour is scanned to get its RGB (red, green and blue) value. This series of three numbers is then used in the virtual painting software to show that colour correctly on the computer screen. The RGB value of a colour can be used in a variety of computer software to display a colour.

Resene has a library of colour swatches on its website that are all made using RGB values. Each Red, Blue or Green value is between 0-255. A colour that is 0,0,0 is black and a colour that is 255, 255, 255 is white. All other colours fit in between this.



Resene Supernova = RGB 255, 180, 55

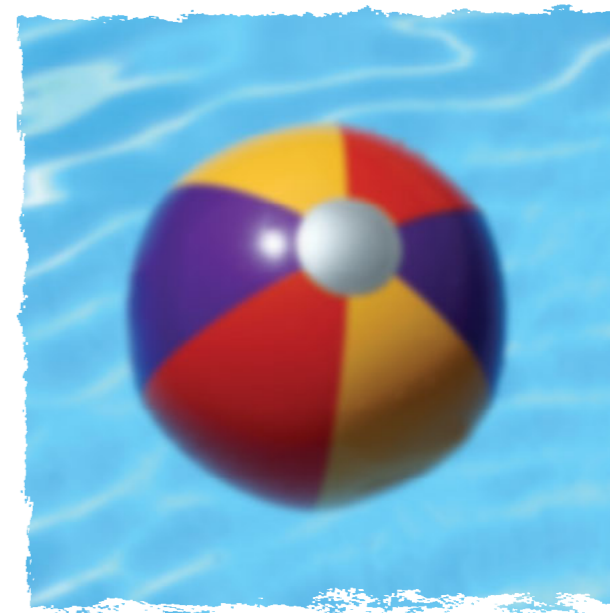


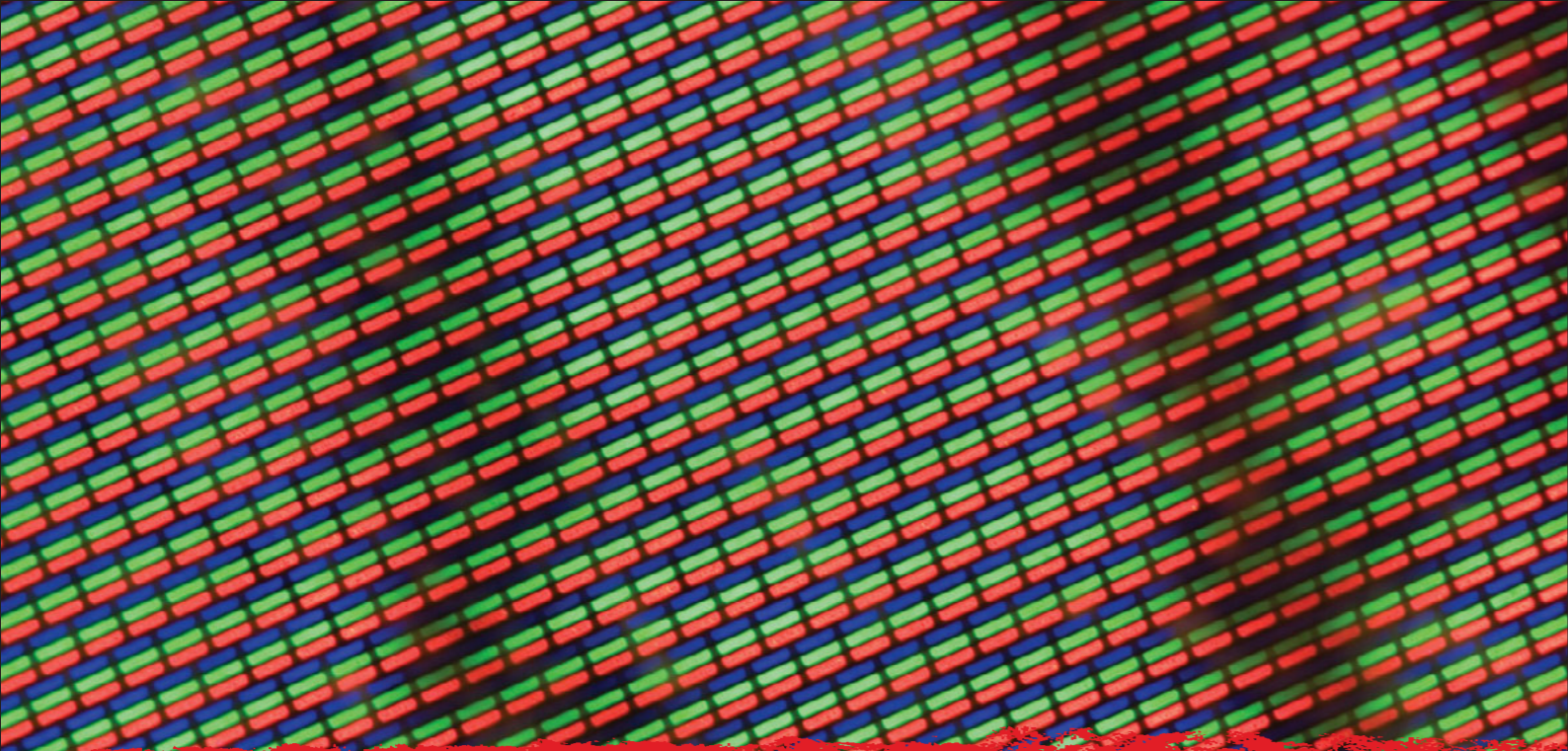
Resene Groovy = RGB 92, 163, 69

Books and newspapers that we read are also made up using dots rather than solid printing. Use a magnifying glass to look at the colour pictures in this book. Each picture is made up of lots of little dots.

The original picture is printed using blue, red, yellow and black. Each picture is broken down into these four colours and they are printed one on top of the other to give the right effect. Like the television and computer screens, our eyes merge the pattern of dots together so that we see the full picture.

If the four different colours are not printed in the right place the picture will look fuzzy.

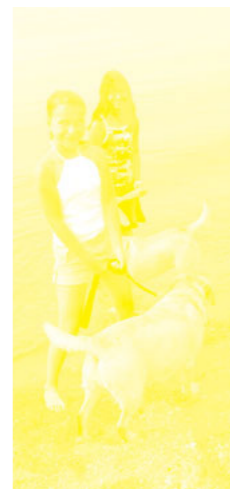




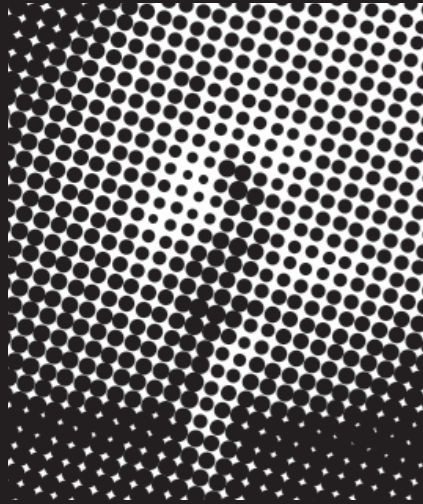
Our eyes merge the dots because they are too small to see individually. Our eyes detect the pattern of colour rather than each individual dot.



In printing the primary colours are similar to paint colours however they have different names and are usually different variants of the colour. The printing colours are known as CMYK. The C = Cyan, the M = Magenta, the Y = Yellow and the K stands for black.



the paint the professionals use



Newspapers are also printed the same way but generally use just one colour, which is black. To make an area darker, such as in a headline, larger black dots are used. To make an area seem paler very small black dots are used spaced further apart. The areas with the smaller dots will look grey as our eyes merge the white background and the black dots to make grey.



The garden at Sainte-Adresse. Claude Monet, 1867

The use of dots of colours is also a popular type of painting, known as impressionist painting. There are many famous artists who have created impressionist artworks using a pattern of dots.

Learn more about colour with the Resene Everywhere colour series. Modules include:

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Dissolving colour
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