

## **CLASS C**

### **OXFORD DISCOVER FUTURES 4- UNIT 7**

**Teacher: Jovanna Xenophontos**

#### **TASK 4**

**Read the article in which colour-blind artist Neil Harbisson explains how a camera attached to his head allows him to hear colour. Then answer the questions that follow.**

#### **The man who hears colour**

Until I was 11, I didn't know I could only see in shades of grey. I thought I could see colours but that I was confusing them. When I was diagnosed with achromatopsia [a rare vision disorder], it was a bit of a shock, but we all heaved a sigh of relief – at least we knew what was wrong. Doctors said it was impossible to cure.

When I was 16, I decided to study art. I told my tutor I could only see in black and white, and his first reaction was, "What the hell are you doing here then?" I told him I really wanted to understand what colour was.

I was eventually allowed to do the entire art course in greyscale - only using black and white. I did very figurative art, trying to reproduce what I could see so that people could compare how my vision was to what they saw. I also learnt that through history, there have been many people who have related colour to sound.

At university I went to a cybernetics lecture by Adam Montandon, a student from Plymouth University, and asked if we could create something so I could see colour. He came up with a simple device, made up of a webcam, a computer and a pair of headphones and created software that would translate any colour in front of me into a sound.

It looks like an antenna that comes out from my head and goes up to the front of my face. At the back of my head there's a chip which transforms the light waves into sound, and I hear the colours, not through my ears but through my bone. Actually, I'm the first human to be legally defined as a cyborg after the British government allowed me to have a passport photo with my antenna!

At the beginning I had some strong headaches because of the constant input of sound, but after five weeks my brain adapted to it, and I started to relate music and real sound to colour. It's amazing how it has helped me turn over a new leaf. It has done wonders for my work. I can now utilize my knowledge of colour to portray mood, light, depth, and point of view in a work of art. I like doing sound portraits - I get close to someone's face,

I take down the sound of the hair, the sounds of the skin, eyes and lips, and then I create a specific chord that relates to the face.

It has changed the way I perceive art. Now, I can go to an art gallery –it's like listening to a concert - and hear the paintings. I know there will be a lot of raised eyebrows with this, but I also enjoy walking in supermarkets - it's like going to a nightclub. I go two or three times a week, depending on how busy I am. I used to be a lonewolf but now I enjoy being with people. My blue moods are gone, I am more physically fit, and the doctor says I have never had better checkup results. I have created a completely new world where colour and sound are exactly the same thing.

When people see someone with something electronic sticking out of their head, they automatically laugh and I can see a bit of contempt in their laughter; others are suspicious. For example, sometimes they don't allow me into places because they think I'm doing something strange. Last year I was attacked by three policemen at a demonstration who thought I was filming them. I told them I was listening to colours, but they thought I was mocking them and tried to pull the camera off my head.

There is no end to the evolution of this electronic eye. At the moment, I can see 360 colours and I have extended this to infrared so I can hear colours that human eyes cannot see. I'm currently working on seeing ultraviolet, which is very important because it can damage our skin. But my favourite colour is aubergine. It looks black but it is actually violet or purple, and it sounds very high-pitched.

Adapted from: <https://www.bbc.com/news>

1. How did Neil feel when he was diagnosed with achromatopsia? Give two details.

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2. What does the art tutor's reaction show when Neil said he could only see in black and white?

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3. How does Neil's device help him with his work?

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4. Which surprising habit does Neil have?

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5. How do people who don't know him react when they see him? Give two details.

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6. Which aspects of Neil Harbisson's life have changed, according to the article. Give three details.

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## **TASK 5**

**Read the blog extracts which describe three colourful festivals (A-C). Then answer the questions that follow.**



### **A. HOLI- A Riot of Colour**

Holi is the one colourful festival that needs no introduction for Indians. Celebrated annually, between February and March, this Hindu festival is one of the most famous colourful festivals in the world. The biggest Holi festivities take place in the streets of India, Sri Lanka and Nepal but over the years it has grown to be a celebration that takes place in many communities across the globe. It marks the onset of the spring season and also celebrates the triumph of good over evil. Crowds gather in public places and cover each other in coloured powder commemorating Krishna and Radha's love. Everyone, regardless of age or gender, plays with water and colours, which brings people together and generates a feeling of unity. Once colour is applied on the face everyone is the same. Children can douse elders with water, women splash men with colour and the rules of social caste and religion are briefly forgotten with everyone taking part.

### **B. A Colourful Mess Of Tomatoes: La Tomatina, Spain**

Another famous festival, La Tomatina, is an annual event, where you can fulfil your childish dreams of making a mess. The festival, which takes place in late October, is one giant tomato fight where people roam the streets flinging an arsenal of over-ripe tomatoes at one another. Participants do need to comply with certain safety regulations in order to participate in the festivities, though. This traditional fruity festival dates back to 1945, when young people attending a festival in the town of Buñol decided they wanted to be a part of the festivities. They stormed a stage of musicians and began to dance and fool around. As a result, one of the musicians fell from the stage and knocked over a market stall full of fruits and vegetables into a disgruntled crowd of festivalgoers. It is said that those attending the festival began to pick up the displaced fruits and pelt them at one another. The following year, those who remembered the festival quarrel brought tomatoes from home and decided to relive the vegetable fight. The event has been celebrated ever since.

### C. Chinese New Year

Also known as the Lunar New Year or Spring Festival, Chinese New Year is celebrated in cities and towns across China and beyond. It marks the first day of the first month in the traditional Chinese lunisolar calendar and is typically a 15-day celebration. Not to be confused with the Lantern Festival, which itself marks the final day of the celebrations, Chinese New Year is celebrated all over the world. Of course, no country celebrates it quite the same way. The festival explodes with a cacophony of colour and sound as multi-coloured decorations are a key part of any Lunar New Year celebration. You will find rainbow-hued dragon dances on the streets, while homes are illuminated with strings of red paper lanterns, and elaborate decorations made of plants and flowers. Even the evening sky lights up with fireworks. There are numerous parades, and nowhere will you find two similar floats in style, colours, or theme. The spectators are brightly dressed as well, mostly in traditional clothing, and also eat lots of exotic delicacies. The Chinese New Year festival usually falls in early February or late January.

Which festival....?	
1. is uniquely celebrated in different parts of the world	___
2. started by accident when some youngsters gate crashed a festival stage	___
3. communicates a powerful lesson about equality	___
4. buzzes with an unpleasant mixture of loud sounds	___
5. requires participants to follow predefined rules	___

### TASK 6

**Read the article on colour and answer the questions that follow.**

A few years ago, a strange trend started to sweep through prisons in Europe and North America . They began painting some of their cells pink. It became so common that in 2014, one in every five prisons and police stations in Switzerland had at least one detention cell that was painted a bright, flamingo pink. Studies had revealed that the colour might positively influence occupants' behaviour, soothing and calming their agitation. Many scientists have disputed the findings but even if the apparent tranquilising effect of pink is in doubt, the readiness with which it was adopted speaks of something deep in the human psyche about the power of colour. And it is perhaps not misplaced

either – there is evidence that colour can influence our behaviour in some surprising ways without us realising.

Much of the research on how colour can affect human behaviour is contradictory though. Some studies suggest it can influence everything from our mood and emotions to how fast our hearts beat, and even physical strength. Bright shades of red, for example, have been found to lead to higher states of arousal and can even stave off drowsiness. Experiments have also suggested that monotonous tasks like proof-reading can be more effectively achieved in red offices while creative tasks, such as essay writing, are better done in blue rooms. But other work has shown that red and blue can also be distracting when trying to perform tasks. Others suggest that certain personality types, such as introverts, might be more susceptible to external influences such as the colour of their surroundings.

These contradictions have led some researchers to warn against placing too much emphasis on claims about the therapeutic and psychological benefits of different colours, saying there is still insufficient evidence to support them. However, there is compelling evidence that there are some areas where colour has been found to have a clear influence on our brains. For example, it can mess with the way we experience our other senses, such as taste and flavour, or even our preference for music. One thing that red seems to convey, fairly consistently, is sweetness. One study of more than 5,300 people from around the world found that red-coloured drinks were most likely to be regarded as the sweetest, no matter where the participants came from.

Another study by Atefeh Yazdanparast, an associate professor in the school of management at Clark University in Worcester, Massachusetts looked at how colour can convey other types of sensual information. Imagine an advert for a towel pops up on this page – immediately, the softness is palpable, almost as if you can feel it through the screen. But that perceived plushness, according to the professor, might not be down to high thread count you can see on the screen, it might be its pastel colour. “There is a clear correspondence between our sense of vision and our sense of touch. We noticed that yes, the colour lightness results in higher anticipated softness, which translates into higher purchase intention. People were also willing to pay more for the objects they perceived as being softer, " she said.

Yazdanparast's broader work focuses on consumer decision-making, and what appears to be happening is that our brains are using colour as a visual signal to compensate for touch. And it is employed to great effect by those who want to sell us stuff – toilet roll, for example, is usually protected from our hands by plastic packaging in supermarkets but is almost always a light pastel shade.

Other studies have shown that colours can directly impact performance, especially among children. When eight- and nine-years-olds conducted a series of tasks in the presence of different shades, academics found their overall performance was significantly worse around red versus grey, which was used as a baseline. And forget blue-sky thinking, try green-space thinking – at least if one study into creativity is credible, which showed a correlation between creativity among children and the presence of that colour, or objects of that colour such as plants. And if you want a child to concentrate, you might consider painting a classroom in a vivid palette and so bolster their reading scores. "It all suggests colour is far more powerful than we thought," says Yazdanparast.

Adapted from: <https://www.bbc.com/future/article>

**1. The writer mentions the example of jail cells painted pink to \_\_\_\_.**

- A. demonstrate how our aesthetic choices can impact behaviour
- B. emphasize how colour can impact the way we conduct ourselves
- C. explain how the colour pink calmed down violent prisoners
- D. highlight how one's surroundings affect their general health

**2. Which sentence is in line with the content of paragraph 2?**

- A. There is unanimous agreement among scientists about the power of colour.
- B. Scientists are sceptical about doing research on how colour affects us.
- C. Scientific research on how colour affects behaviour is conflicting.
- D. The scientific community has given research on colour a mixed response.

**3. According to the article, there is conclusive evidence that \_\_\_\_.**

- A. colour perception is a multisensory experience
- B. colourful foods and drinks are more desirable
- C. red colouring is more effective in sweet drinks
- D. colour dictates our artistic taste in music

**4. Which of the following sentences is correct, according to the article?**

- A. Marketeers use colour to manipulate consumers.
- B. The influence of touch is a key element in consumer marketing.
- C. Colour bridges the touch-feel gap with pop-ups.
- D. There is a clear link between colour and the behaviour of marketeers.

## 5. Which title would best fit the article?

- A. Colour - a blessing in disguise.
- B. There's a reason we don't see the world in black and white.
- C. Colour is only the tip of the iceberg.
- D. There's more to colour than meets the eye.

### Task 7

Read the following article about colour. Write a summary about the beneficial effects of colour in our lives.

Your summary should be about 100 words long (and no more than 120 words long).

#### A colourful life

Colour is everywhere. It shapes how we perceive the world and it's an essential part of our cultural identity. But we are often hesitant about incorporating colour into our lives, says Lauren Rosenberg, an accomplished scientist in the field of colour.

Even if we don't realise it, colour has a significant impact on our lives. For starters, it can make us less violent. The colour pink has been found to calm those experiencing violent episodes. This is why a number of prisons in Switzerland and the United States are painted pink.

But it is also at the center of debates about gender, masculinity and femininity. Pink is strongly associated with femininity and delicacy, which is why it's easy to conjure an image of a girl in a pink tutu playing with a pink Disney Princess Barbie, but it may be harder to grasp the idea of a boy dressed head to toe in the colour. But attitudes won't fully change until men stop justifying or defending wearing pink, believes Jo Paoletti, academic and author of "Pink and Blue: Telling the Girls From the Boys in America."

According to Rosenberg, the colour orange increases oxygen to the brain, which stimulates mental activity and makes you livelier and more energetic. That is the power of orange. So, if you feel worn out, the colour orange is what you need. There are however some negative associations of the colour which include crassness, rudeness and frivolity. "Darker shades of orange seem to have the most negative associations, such as untrustworthiness and deceitfulness", says Paoletti.

It doesn't take much to realize that the colour black is linked to darkness, but it has many dimensions. It is associated with grief, through experiences of death, but experts argue that we need black to overcome our fears.

Most human cultures dislike the color of darkness, which is why in language, black often refers to negative things such as witches and unlucky cats. But black is not

as dark as we think. The word black originally meant shining white or flashing. The Chinese thought black ink captured every color in nature, and French artist Pierre-

Some people believe yellow is the color of warmth and happiness. Others think it makes you agitated. Leatrice Eiseman, an expert in the psychology of colour, pushes for the former. She says that scientific research has shown that, indeed, yellow makes people happier as its mood improving traits relieve stress.

Humans are trichromats, meaning we perceive three primary colours: blue, green and red. The retina in a human eye can detect light between wavelengths of 400 and 700 nanometers, a range known as the visible spectrum. In the middle of the spectrum resides green. This wavelength is where our perception is at its best – and keeps us healthy. The colour green is why, despite not residing in the forests anymore, we are able to tell apart the foods we should and should not be eating. Our eyes can catch a wilted brown piece of lettuce in our salad or a banana that is not yet ripe.

Red is our colour. Our bodies produce 2 million red blood cells every single second. Many creation myths claim that the first humans were made from red earth. The name Adam is derived from the Hebrew word for red. Humans are some of the only mammals who can see red. The fact is that we need the colour red because it has a powerful effect on our brains, making us feel stronger and more resilient. Case in point, studies have found that wearing red uniforms gives a sense of power to players, making them feel stronger and more likely to win.

Colour permeates all aspects of our lives. Living a colourful life has its benefits. Take time to contemplate what colours resonate with you and take advantage of the benefits a colourful life has to offer. As Russian artist Kandinsky noted, “colour is a power which directly influences the soul.”

Adapted from: <https://edition.cnn.com>

## TASK 8

You recently took part in a festival of colour. Write an email to an English-speaking friend telling him/her about it. In your email, you should:

- describe the festival
- explain what you did there
- say how taking part made you feel



**Your email should be between 150-200 words long.**



## TASK 9

You recently had a class discussion about living a colourful life. Now, your English teacher has asked you to write an article for your school magazine in response to the following statement:



“Colour is a power which directly influences the soul.”

How far do you agree? Give reasons to support your answer.

Here are some comments from your classmates on this subject, but you are free to use any ideas of your own.

Colour affects the decisions we make every day.

If black and white were the only colours in the world, what would life be like? I'm sure the answer would be... dull.

Your article should be between 150-200 words long.