## CROSSROADS Ganguage Studio's Newsletter October, 2023

# EYE COLOUR 

$\mathbf{O n}_{\text {ne }}$ of the most distinctive features of human physical diversity that shapes our culture and perception of others is our eyes; specifically the colour of the eye iris.


The iris has two layers. The back layer is almost always brown, and the front (visible) layer's colour depends on how much melanin pigment we have. These 2 layers create a 3 dimensional palette of colours, ranging from grey, blue, green to dark brown. In some cases, the eyes may look violet, pink, or even multicoloured.
The combinations of colour hues are infinite. There are no two people with identical iris colour. Because there are as many as 60 genes responsible for eye colour, the resultant iris colour and pattern can never be duplicated.

And speaking of genes, the very reason we have such a diversity of eyes is due to gene mutation that happened around 10,000 years ago, when all humans sported brown eyes.


Since then, a blue colour appeared and began to mutate further to create a full spectrum of browns, blues and greens. This is particularly the case with people living in continental Europe.

You may ask yourself, why do we have these differences? Are some advantageous to us? Are there pros and cons to, say, green eyes?

Well, unsurprisingly, there is a tonne of research done to answer these and many other questions.

Brown eyes are the most common in the world, and they carry with them clear health benefits. Apart from naturally protecting us from excessive UV light entering our eyes, brown eye colours lower the risk of melanoma and macular degeneration. Unfortunately, people with this colour suffer from cataracts more often than those with lighter eyes.

On the other hand, blue eyes (and other lightcoloured eyes) have the advantage of a lower risk of developing vitiligo (losing skin pigment).

The downside of lighter eyes is that they let in more sunlight and often cause irritation and other adverse health effects.


We have a great sense of esthetics, and appearance plays a big role in shaping the way we think and interact with others. We find different eye colours more attractive and interesting to look at. We choose our life partners often based on the colour of their eyes. It's also one of the best features to remember or recognise people by.
When we are born, we have either brown or blue eyes and in the first year, melanin develops and will change to a more permanent and unique colour, that generally remains the same throughout our life. A drastic change of iris colour or an appearance of black spots is a sign of a bad health condition, so it's advisable to see an optometrist.

Article 6v Marek


NET LESSONS: Too busy to come to CROSSROADS?
.... Try our lessons on the net!
For more facts about eye colour, head to:
https://redmondeyedoctors.com/why-do-we-have-different-eye-colors/


Joshua Says: "You have to be wrong to learn." This is a quotation from Professor Michelle Simmons, a quantum physicist. What caught my attention in this quote is the words "you have to be..." There is no doubt here. If you want to learn, you must make mistakes. This is true, not only for quantum physicists, but for everyone in any field. It also follows that those who "know" they are right have stopped learning. The message? Keep making mistakes, they only help you to grow.

Junko Says: I think by now everyone has met Katrina, "Cat", our new staff member. If you read our November ' 22 newsletter you will be aware of all the benefits cats can bring into our lives; their purrs have healing properties that work even on humans, they can help to reduce stress levels in people, lessen the risk of heart disease and have a strong positive influence on our mental health. "Cat" has been with us for only a couple of months, but I can see she is already having a positive effect in Crossroads!
 Marek Says: The colour of our eyes is largely determined in the first year of our life, but external influences, such as climatic conditions, diet, certain illnesses, and even physical damage to the eyesight, may and does result in the iris changing colour. We're talking a subtle change of the colour intensity, but occasionally the iris may go from, say, brown to blue. A musician David Bowie is a prime example of such a radical change.

Mandcy dit: C est enfin l'automne. Le climat est devenu plus frais et je me délecte en pensant à routes les saveurs d'automne. En effet, octobre est la saison des vendanges, on récolte le raisin afin de le déguster ou de faire du vin. De plus, de nombreux fruits à coque sont disponibles tels que les noix ou les châtaignes. Et je me réjouis à l'idée de dévorer un petit Mont-blanc où une tarte aux noix de pécan. Et vous? Qu'allez-vous déguster? Partagez-le avec moi !


## ACROSS

1 insightful observation
5 part of an eye's retina
6 unchanging
9 unfavorable
13 genetic alteration
16 a unit of weight
17 pigments in skin and eyes
18 concerning beauty (especially in art)
19 eye doctor
20 a range of colors

## DOWN

2 causing annoyance
3 part of the eye
4 malignant skin tissue
7 too much
8 declining in quality or power
10 the final consequence
11 the qualities of colors
12 characteristic, typical
14 having a more favorable position
15 many different types or kinds


Complete the sentences below by choosing the best conjunctions from the base below. Same may be used mare than once and same may fit mare than ane sentence.

Since so that so where when although even though and but or because

1. She went to the store $\qquad$ it was closed.
2. $\qquad$ he held the record, he didn't win the race.
$\qquad$ he is generous $\qquad$ helpful.
3. My friend recommended that move $\qquad$ I watched it.
4. $\qquad$ you are free, let's go out for a drink together.
5. $\qquad$ he was very ill, he turned up for work yesterday.
6. I need to work hard now $\qquad$ I can retire early.
7. $\qquad$ he was angry with his boss, he didn't say a word.
8. I don't know $\qquad$ I can buy one.

9. She told her kids to keep quiet $\qquad$ go outside play.

