
BBC LEARNING ENGLISH

6 Minute English

The three-parent baby



NB: This is not a word-for-word transcript

Neil

Hello. Welcome to 6 Minute English. I'm Neil and with me in the studio today is Harry.

Harry

Hello!

Neil

We all have two biological parents but in the future if someone from the UK tells you they have three parents, it might be true.

Harry

That's right. This is because the UK has become the first country to approve laws allowing the creation of babies with **DNA** from three people! DNA is the chemical structure present in the centre of a cell which defines somebody's characteristics. This is to fight a particular disease.

Neil

Yes. Sometimes parts of the DNA called **genes** are **faulty**; it means they don't work properly and this might cause problems later on. A new technique will allow some of these genes to be replaced by healthy ones from a third person.

Harry

This practice is controversial – people argue about it. They fear we're going to mess with nature and end up with a Frankenstein's monster!

Neil

Wow, that would be frightening, let's hope it doesn't happen! Well, in this programme we're talking about the three-parent baby and you're going to learn some vocabulary related to reproduction.

Harry

Genetics – the science of how living creatures pass their characteristics to their offspring – is fascinating, Neil!

Neil

It is fascinating, and you know what I find most surprising, Harry? It's how much DNA we have in common with other living creatures.

Harry

I've heard that a very high percentage of our DNA is similar to the DNA of monkeys.

Neil

The comparison with monkeys is easy. Over 95% of our DNA is identical to theirs. But what you might not know is... how much of our DNA is similar to the DNA in a banana?

Harry

A banana?!

Neil

Yes. And that's my quiz question today. What percentage of our DNA is similar to that of a banana? Is it:

- a) About 1%
- b) About 20% or
- c) About 50%

Harry

I think we have very little in common with bananas so I'm gonna go for 1%.

Neil

Well, I'll give you the correct answer at the end of the programme. Now let's talk about the three-parent baby. A **pioneering** technique, in other words, a technique never used before, has been developed by scientists in Newcastle University here in the UK. The technique helps people with faulty **mitochondria**, which are structures that work like energy factories in our cells. The mitochondria are like batteries.

Harry

And what kind of problems do people who inherit faulty mitochondria have?

Neil

They have serious health problems such as brain damage and heart failure.

Harry

That's terrible! Maybe it would be good to have this technique approved.

Neil

Well, not everybody agrees with it. Fiona Bruce, who is a Member of Parliament here in Britain, expressed concern when the proposal was discussed in Parliament. Listen out for

the expression she uses right at the beginning of her speech. It means that when you start something, you can't take it back.

Fiona Bruce MP

Once **the genie is out of the bottle**, once these procedures that we are being asked to authorise today go ahead, there will be no going back for society.

Harry

She says that **the genie is out of the bottle**. It's an expression to do with fairy tales – in particular, the story of Aladdin, when he rubs a lamp and a genie appears. When the genie is released, anything is possible – even bad things. And there's nothing anyone can do to stop it.

Neil

So in the case of DNA engineering, people are afraid that similar techniques might be used to create **designer babies** – babies whose characteristics like height, sex, hair and eye colour are created to order. Or we might be looking at babies with several parents - and who knows where it might end.

Harry

But the approval of this proposal has also made many people happy,

Neil

Yes, people like Victoria, a mother who has a sick child because of faulty mitochondria. She uses an expression which means 'amazing or astonishing'. Which expression is it?

Victoria Holliday, mother who will benefit from the new technique

It's just **mind-boggling** what this could mean for our family and for other families who are affected. It's just the best news!

Harry

She uses the expression 'mind-boggling', in other words something astonishing, overwhelming. That's great news for this lady. I'm happy for her.

Neil

Yes, it is. According to statistics faulty mitochondria affects one in every 6,500 babies - a considerable number of people. Well, this is an interesting subject but we're running out of time and...

Harry

... and you're going to tell me what percentage of DNA we have in common with a banana, aren't you?

Neil

I am. And the options I gave you were about 1%, 20% or 50%. And you said...

Harry

I said I thought it was just 1%.

Neil

Well, can you believe that it's 50%? We are half... half and half like bananas.

Harry

That's incredible! They're not even mammals, we are so different to them ... It's mind-boggling!

Neil

Let's listen to today's words once again, Harry.

Harry

Yes. They were:

DNA

genes

faulty

genetics

pioneering

mitochondria (the singular is irregular: mitochondrion)

the genie is out of the bottle

designer babies

mind-boggling

Neil

Well, that's it for today. Do go to www.bbclearningenglish.com to find more 6 Minute English programmes. Until next time. Goodbye!

Harry

Bye!

Vocabulary

DNA

chemical structure present in the centre of a cell which defines somebody's characteristics

genes

parts of the DNA

faulty

defective, something that doesn't work properly

genetics

the science of how living creatures pass their characteristics to their offspring

pioneering

something never done before

mitochondria (the singular is irregular: mitochondrion)

structures in a cell which produce energy, the cell's 'batteries'

the gene is out of the bottle

something which can't be stopped after it has started

designer babies

babies whose characteristics like height, sex, hair and eye colour are created to order

mind-boggling

astonishing, overwhelming