Why Don’t I Look Like a Fish?

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Illustrated by Gayle Hori

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I ask a lot of questions because I want to know...
Why are we different?
What tells us how to grow?
Why did mom have me and not a kangaroo?
Why don’t I look at all like the creatures at the zoo?
My science teacher told me
we all start as one cell.
Fish and birds and bugs do,
and flowers do as well.
I looked into the microscope and saw a tiny cell. In the middle was the nucleus, like a pearl within its shell.

The cell must be the place where all the info hides.

I will use a microscope to see the cell’s insides.
I zoomed in a little closer
and this is what I got.
A bunch of stringy chromosomes
like noodles in a pot.
How do the chromosomes know just what they should do? How do they make my eyes look green or brown or blue?

I said, “Sis, I need some answers.” She said, “Don’t have a fit. I will go to my computer, and quickly google it.”
With a few clicks of the keyboard, she looked it up for me. Her search words were genetics and heredity.
De-ox-y-ri-bo-Nu-cle-ic Acid

The chromosomes are long pieces of stuff called DNA.

De-ox-y-ri-bo-nu-cle-ic acid,
a big mouthful to say.

(de-ox-e-ri-bo-nū-clā-ic)
DNA is long and thin and wraps up nice and neat. From each tiny little cell, it can stretch out to six feet.
DNA is like a ladder twisted round and round. It’s called a **double helix**. That’s what my sister found.

Scientists like to study shorter parts called genes. Genes hold the information for all the traits you’ve seen.
Each step of the ladder is made up of one pair. When the ladder unzips, a code is written there.

A gene is quite simply a protein recipe. Written in 4 letters, A, T, G, and C.
So now I have the answers for how I came to be. DNA holds the info for the person that you see.
DNA tells the cells which proteins they should make. Those proteins then combine and you see a trait.
Your DNA came to you from your mom and dad. Half came from each, they passed down what they had.
Your parent’s genes gave you
the freckles on your nose,
the dimples on your cheeks,
and the length of your big toes.
Looking at old photos can give you some clues. Genes that your parents got are ones that you might use.
You can’t look like a donkey,
so forget your fears.
Unless...
...your Great-Grandpa Joe had humongous ears!!!
A boy wonders why we do not look like animals. This simple introduction to genetics explains that we are different because we have our own unique DNA.

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