Science Club: DNA

For our last week of science club we learned why we look like we do, and why we look different from other living things (wood bugs for example....)

The instructions for how to build a living thing - and why every living thing looks different - is in its DNA.

We isolated our own DNA from our cheek cells. We used detergent to break open the cells and alcohol to separate out the DNA. Each white wispy strand that you see in the tube is thousands of DNA molecules stuck together. The liquid is alcohol to preserve the DNA - it should last forever.

Our DNA is made up of billions of units of As, Cs, Gs and Ts (each too small to see without a powerful microscope). If the order of the units is changed the instructions change, and a different living thing results. (We did a puzzle to show this). The more similar the instructions, the more similar two living things look (two people have very similar instructions; wood bugs and people have more differences as they are both animals but look quite different; plants and people have even more differences). We are related to all living things.

Then we used microscopes to see where the DNA is in our cells. We made a slide of our cheek cells stained with iodine. We found the nucleus in the cells, which is where the DNA is.

This is the last science club \mathfrak{S}

A great book for doing your own hands-on science at home is "101 Great Science Experiments" by Neil Ardley (published by DK), available at KidsBooks and the Vancouver Public Library. If you have any questions about doing your own experiments, or anything else sciency, contact Ingrid at isulston@gmail.com.

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