

## DESTINATION: JUPITER!

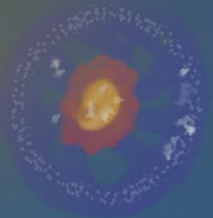
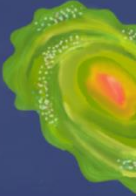
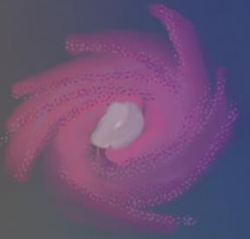
Lilika  
ZauberLab

DID YOU KNOW?!

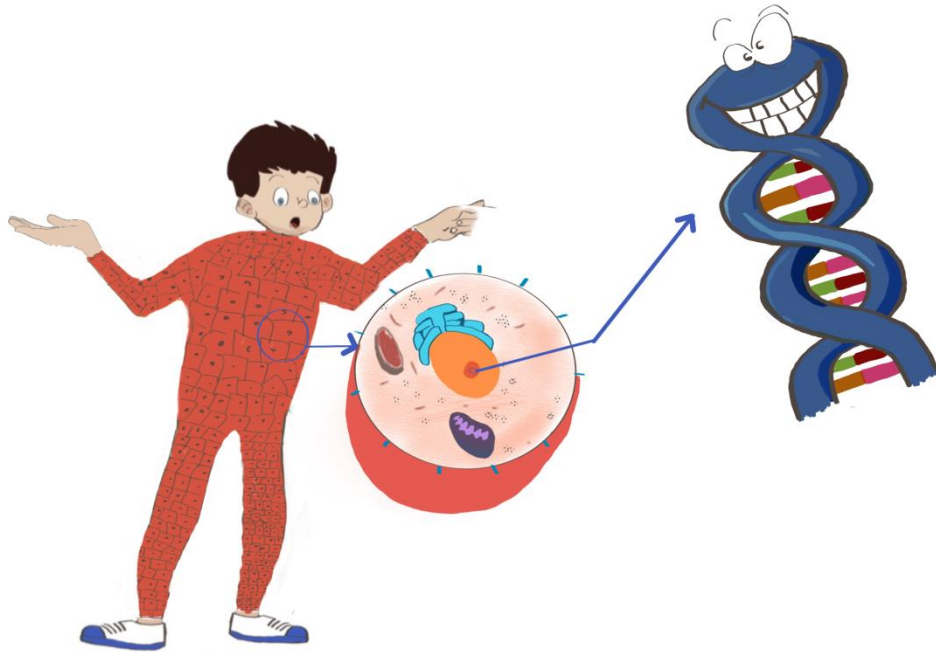
If you took all your DNA and straightened it out and put it end-to-end to form a chain... Do you know how long this chain would be?

It would stretch to Jupiter and back to our Earth at least 10 times!

But what does that really mean?



# WHAT IS DNA? WHERE CAN I FIND IT?



Our body is made of millions of very small building blocks. We call them cells. Cells are very small, so small that you can only see them under a microscope. Inside every cell, there is a nucleus and inside every nucleus there is DNA. DNA is the instruction manual for our body. Since our body has so many complex functions, DNA is also very long.

Our DNA is almost 2 meters long! It gets neatly folded up to fit inside the minute nucleus of our cells.

Space is HUGE. Jupiter is almost 7,740,000,000 km away from our Earth.

So now, imagine this... Laying DNA in long chain, and you can lasso Jupiter 10 times over!



# JUPITER! HERE WE GO!

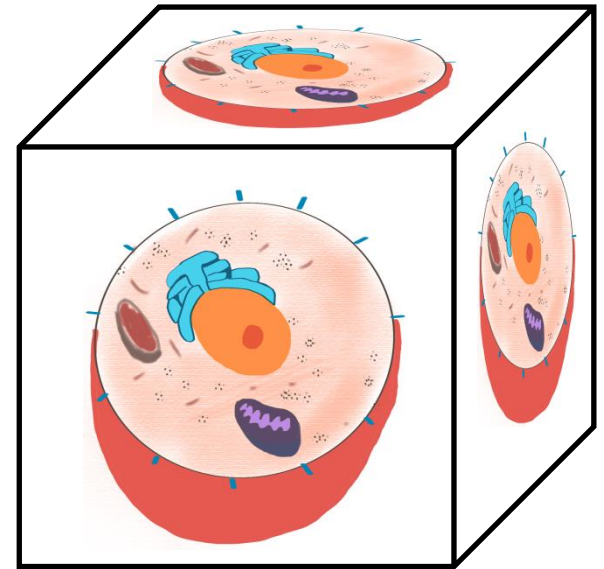


You will need:

- Printed templates (see next pages)
- Glue
- Scissors

What to do...

1. Template 1: Cut along the dotted lines and glue, end-to-end, where instructed to form a 2 meters long chain of DNA.
2. Template 2: Cut along the edges. Glue on all edges as instructed, except the one that says 'Last Glue'.
3. Fold your paper DNA as best as you can to be able to fit inside the cube.
4. Put your DNA inside the nucleus of the cell and throw the cube to see how far you will travel with your DNA...10 times to Jupiter!



You just managed to fold the DNA back on the cell! Was it hard? Imagine how well the DNA must be folded in our cells to fit such a tiny space!



# TEMPLATE 1: DNA



Cut along the lines and glue end-to-end, where instructed!

		Glue
Glue		Glue
Glue		Glue
Glue		Glue
Glue		Glue
Glue		Glue
Glue		Glue
Glue		Glue

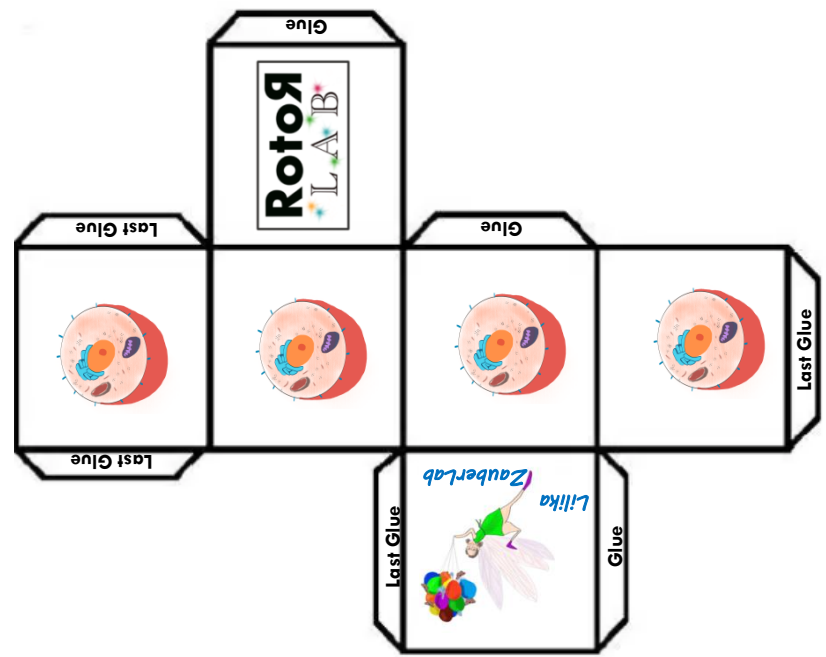
25 cm



# TEMPLATE 2: NUCLEUS OF THE CELL



Cut along the lines and glue end-to-end, where instructed!



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