



# Millie micro nano pico

*by Tiziana Stoto*

**Book 5** in which Millie wishes she were more attractive and wonders about quarks

● Ouch! I'm sore all over.  
It must be the swimming and surfing.  
But I should get ready.



I need to ask the electrons about the plus  
and minus bits on batteries.  
I can't figure out what the plus is.

● I'm off! Let's hope somebody switched off the current.



**MILLIE**

**MICRO**

**NANO**

**PICO**

**MILLIE**

**MICRO**

**NANO**

**PICO**

**MILLIE**

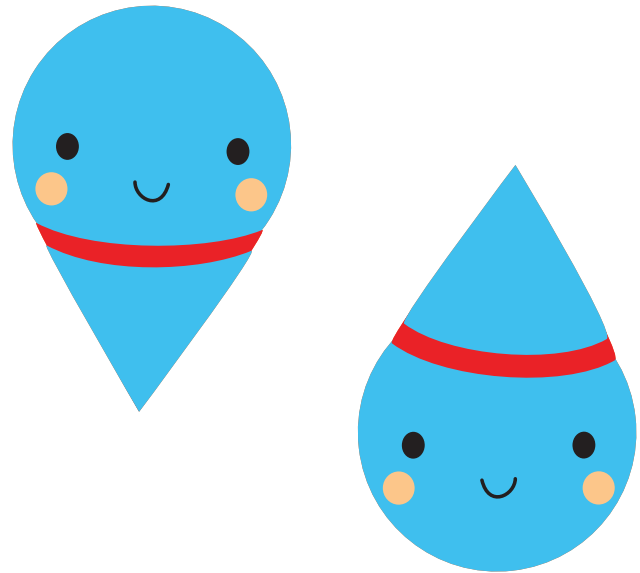
**MICRO**

**NANO**

**PICO**

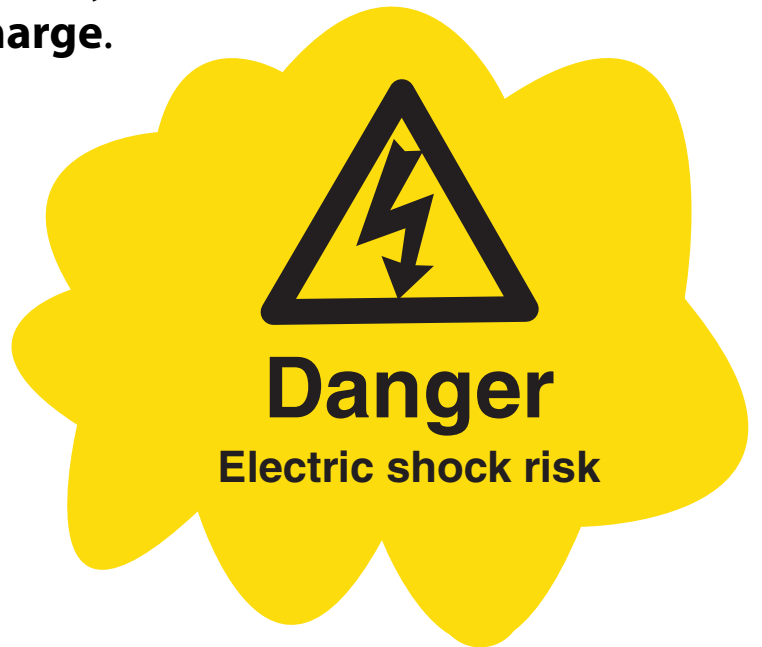
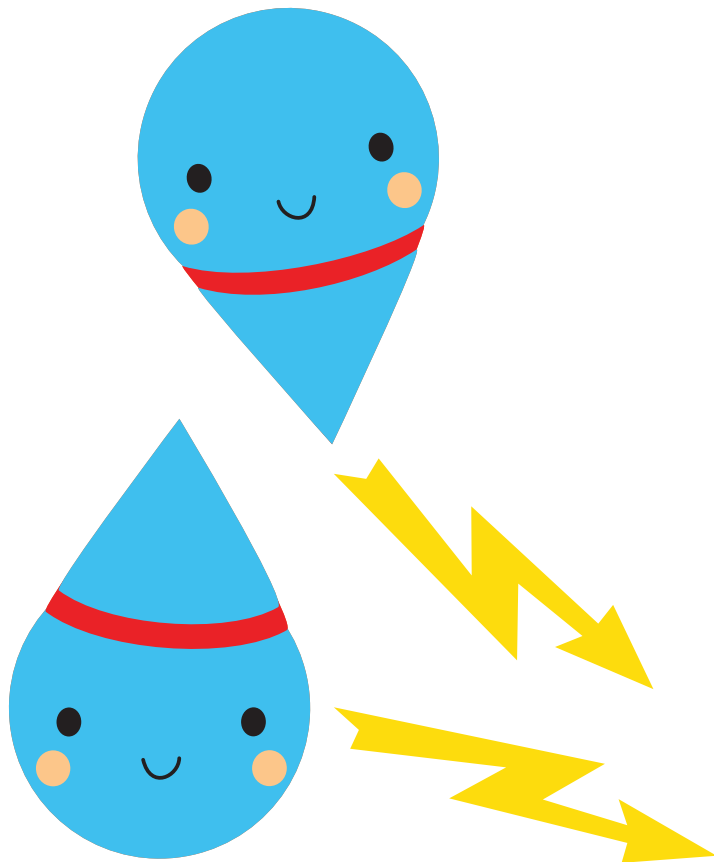


▼▲ Hi Millie.

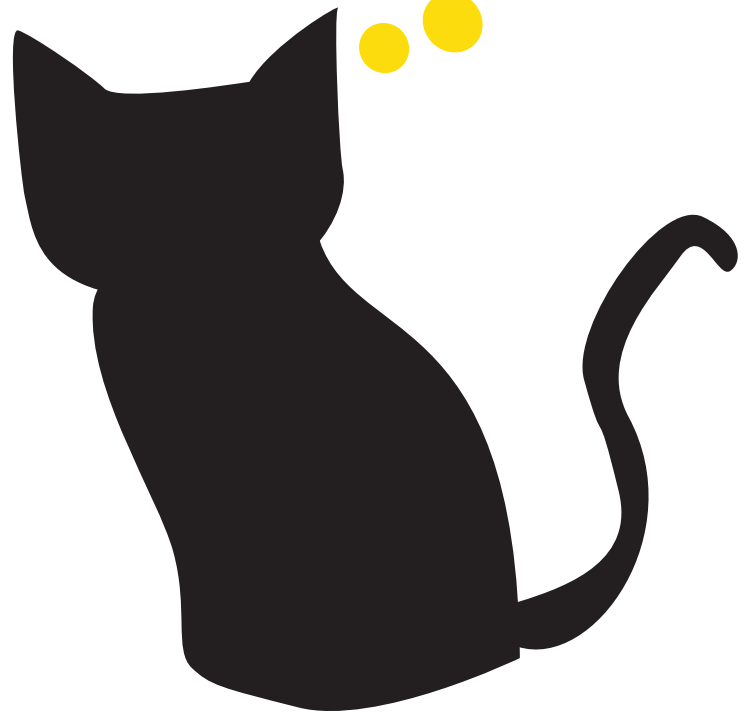


● Hi guys.  
Last time you said that  
all electrons are **negative charges**.  
Are there **positive charges**?

▼ Because we carry an **electric charge**.



● Oh, no.  
You must be dangerous.  
I'm scared!





▼▲ Oh Millie. How silly!

Our charge is so small. It wouldn't hurt anybody.

● In that case, I think I know what you are going to say next.

**Millie micro nano pico Book 5** is about electric charge and in particular the elementary charged particles called quarks. The protons and neutrons inside the atomic nucleus are made of quarks.

Millie wants to know how to tell the difference between a neutron and a proton. She discovers that only protons are charged and that their positive charge is the opposite of the negative charge of an electron.

In this adventure Millie learns about the attraction between opposite charges. She also finds out that masses are attracted because of gravity, and that there are similarities between electric and gravitational fields.

These books will stimulate children's curiosity. Questions are more than welcome. Send Millie a message at [millie.kolorato.com](http://millie.kolorato.com) or on Facebook at [www.facebook/milliemicronanopico/](http://www.facebook/milliemicronanopico/).

