Meet a Scientist: Dr. Maggie Teliska-Parke

Meet Dr. Maggie Teliska-Parke. She is a **battery scientist**.

Batteries are everywhere. They power your remote controls, phones, and computers. You are probably familiar with batteries that look like this $\longrightarrow \bigotimes$ or with button batteries that look like this $\longrightarrow \bigotimes$. These small batteries power small devices.

What kind of batteries does Maggie work with?

Maggie works with batteries that power entire towns and cities! Lots of energy is needed to provide this power. The batteries Maggie works with are about the size of a juice box. Hundreds of these bigger batteries are stacked together and placed in large containers. The energy from these batteries powers lights and appliances in stores, buildings, and homes.

What is special about Maggie's batteries?

Maggie's batteries use **renewable energy**. These batteries store energy from renewable sources, like the wind or sun. Machines called wind turbines capture energy from the wind, and solar panels capture energy from the sun. Sometimes the wind turbines or solar panels have more energy than can be used at one time. Maggie's batteries store this extra energy and provide backup power. The batteries act like a piggy bank, saving energy for when the sun isn't shining or the wind isn't blowing.

Having backup power is especially important when weather events happen and communities need more electricity.

Renewable energy:

Energy from a source that cannot be depleted, such as from wind or the sun.

Maggie's job is to ensure that these batteries

powering the city work safely to take in, store, and release energy.



Solar panels (right) store energy from the sun. You may have seen solar panels on the roof of a building, or on a structure in large parking lots!

Read the interview on the next page to learn more about Maggie and her work!





Meet a Scientist: Maggie Teliska-Parke

What was your childhood like? Did you like science?

I grew up in New York. As a child, I was naturally drawn to science. I enjoyed learning math from my mother and how to build things from my father. I received a chemistry set for Christmas one year and I did every experiment in the kit, from making new chemical reactions to building new materials and colors. I was inspired, and took science classes in school whenever possible.



Maggie with her cat named Tiger.

I also enjoyed crafting and learned crochet from my grandmother. I still crochet and knit today. I always had pet cats growing up and still have one cat today. I also enjoyed writing stories that start with "once upon a time."

Describe a typical day at your job.

You will often find me at my desk talking to colleagues at work. I attend meetings to discuss problems and develop solutions to make sure our batteries stay reliable.

Some days I am at a battery site where I educate people on how the batteries can serve their communities. When I travel, I go to our sites to talk with the site teams about maintaining the batteries. I also help the site teams with their daily tasks.

Describe a time in your life when something did not go as planned.

I was always told I wasn't good at writing. My teachers used up the ink in the red pens from correcting my stories! Later in life, I practiced writing, and soon I was writing stories and entering contests. I didn't place in my first contest, but I kept trying. Soon I placed in the next two contests!

Is there anything else you want to share?

I have a battery inside me. My heart isn't very strong. Doctors put in a medical device called a pacemaker. A battery powers the pacemaker and produces electricity to help keep my heart rate regular.

What advice do you have for students today?

Everything that you learn can be applied and used in many different situations. Always be learning. The world will always have problems that will need creative problem solving.