

Dear colleagues, please write a brief paragraph to the collaborative story and write your name at the end. This text will be moved into a storyjumper!!

## A JOURNEY INTO THE PAST

Hello! Are we ready to begin the journey that will take us to meet our favourite scientist to help us discover eTwinnio?

Well, close your eyes, take a deep breath and...

We're in Paris and we're going to meet in Marie and Pierre Curie's laboratory. It's a cold, damp and precarious space. In the distance, we can see the complicity between them. They are soul mates who have found each other in science. Together, they have won the Nobel Prize in Physics for their discovery of polonium, radium and radioactivity. Now they want to see what these discoveries can offer as a therapeutic measure to the world.

We sneak up on them and introduce ourselves. Marie is delighted that there are so many students interested in the discovery of a new element, the eTwinnio. She tells us how many times she had to do the same experiment, once and again, in order to find and synthesize about one gram of radium. The generous, courageous and tenacious look in her eyes stands out. Pierre, a little shier but very kind to us, tells us everything that Marie has contributed to him as a scientist. They have gone through many adversities, but they have never stopped believing that together they could achieve all their goals.

They kindly invite us to share a coffee at their home. There we meet Irene and Eve, they take seven years. Irene is a lively girl, with a great interest in study and science. With the help of her mother, she learns to experience it in a playful way, based on an integral education. Little Eve is an angel who in the future, we know, will opt for the creative and artistic, learning to play the piano from an early age. We love how Grandpa Eugene takes care of the girls, helping the parents who spend the day in his laboratory.

The few free moments are always spent with the family, in contact with nature, bicycle rides, on the beach, and always remembering her ascents of the Tatra Mountains, which Marie loved so much in her native Poland. **Written by Seville**

And now we begin to ask what defines a chemical element.

All the known matter are made of atoms. But, where were they form? In the Earth, in the Ocean or in the Space?

As we know, the elements present in the Earth crust and in kites are Hydrogen (56%), Oxygen (30%), Carbon (10%), Nitrogen (1,7%), Sulphur (0,3%) and phosphorus (0,08%). In human body there are 59 different elements.

But where were the oldest elements formed? The answer is: in the Universe. And the most abundant elements in the Universe are H, He, O and C. Scientists can know the composition

of astronomical objects studying the electromagnetic radiation that come to the Earth and through meteorites.

The origin of these elements is the Big Bang. In this phenomenon the lightest elements were formed: Hydrogen, Helium and Lithium. Then, the rest of the elements are forming inside the Stars by nuclear reactions in which their energy is transformed in mass:  $E = m \cdot c^2$

Marie and Pierre go on talking wisely. They say that elements tell us the age of the star and they can be found in nature, in any state, sometimes the essential is invisible to our eyes, that we should always be attentive to what we perceive and the reactions it causes in what surrounds us. We have to find it and then define in which family it would be added, its weight and atomic mass. Some elements can emit energy through themselves.

And always make a disclosure in any magazine or scientific article, with the aim of making it a heritage of humanity, as they decided to do with the radio when they discovered it.

Marie does not know that she will visit Spain several times after the proclamation of the Second Republic on April 14, 1931 and later in April 1919 invited by the I National Congress of Medicine with the presence of King Alfonso XIII. Always trying to defend that science should get public funding.

She doesn't either know the influence she will have on future women scientists as a model and her influence on a group of teachers and students from several countries all around Europe who will collaborate in a project, working together as she liked to do.

Written by Atarfe, Granada

Marie Curie, the scientist who received the twice-nobel prize, was closely following the education of her daughters Irene and Eve while exploring Polonium and Radium in the lab. He noticed Irene's interest in mathematics, physics and chemistry. In the years to come, Irene worked for science with her husband Frederic without giving up. Irene and Frederic worked tirelessly and realized that in 1934 they bombarded aluminum foil with alpha particles, producing a new radioactive element. They converted aluminum atoms into radioactive phosphorus atoms that are not found in nature. For the first time, in 1935 they were awarded the Nobel Prize for Chemistry because they artificially produced an isotope that was not found in nature. So, Marie Curie, a scientist, is also an excellent mother and now she continues to inspire teachers and students with eTwinio. **Written by Çanakkale**

Marie curie played a leading role in creating a place for women in science. Due to her pioneering contributions and dedication to her work, Curie was nominated several 'first woman' titles. In 1903, she became the first woman to win a Nobel Prize (Physics) and when she was awarded the Prize again in 1911, this time for Chemistry. She became the first woman to win it twice and the most interesting fact of all is that she won the Nobel Prize for her contribution to two different scientific fields. After the death of her husband, she was offered his position in the University of Paris, making her the first woman to become a professor in that institute. Pierre

Curie was killed in a carriage accident while crossing the street in April 19th 1906, and she succeeded his professorship. Marie Curie was determined to devote her life to the work that she and her husband had partnered together so successfully. Curie never actively fought for or wished any of these titles. Instead, she merely carried on with her scientific research. She did, however, use these titles and the respect they demanded, to clear the path of her research. Marie Curie is the paradigm of what a person can do when there's genuine love for one's work. Her daughter Irene Curie was an integral part of her research team. Madame Curie contracted Leukaemia from her lifelong exposure to radioactive substances and died in 1934. The mal-effects of radiation are so deadly that all her original research papers and stationery, even her personal items like clothing and cookbooks, are very dangerous to touch. Her lab books are still preserved in lead lined boxes.

Here's to pay respects to the woman who was consumed by her love for science for all those years of scientific discovery... **written by 11th Gymnasio of Heraklion, Crete, GR**

This journey to the past and especially this interview has been fascinating. Knowing more about this extraordinary woman has made that her influence on us increases. We have been witnesses that Curie's family is an example to follow, a reference for all the kids who could to be a scientist in the future.

The love for her job, for her family, her constancy and dedication to the science are clues we must follow to go on looking for the eTwinnio. **Written by Ceuta, Spain.**

¿Sabes que Marie Curie luchó por la paz y ayudó a salvar muchas vidas en la primera guerra mundial?

En el desolado escenario de la **Primera Guerra Mundial**, en 1914... La muerte asomaba en toda Europa, la pólvora, las trincheras llenas de barro, los soldados con graves heridas de bayoneta y fusiles..Ante este horror, Marie Curie consiguió adaptar viejas camionetas como ambulancias que podían realizar radiografías a los heridos. La científica polaca, de 47 años con una brillante determinación, viajó con

su hija mayor, Irène, de apenas 17 años. Ella sabía que su descubrimiento, los rayos X, podían salvar vidas.

Durante la guerra, Marie ya tenía dos Nobel -uno de Física y otro de Química. Pero para arriesgar su vida conduciendo esa ambulancia había tenido que pelear con el Gobierno y el Ejército y había donado sus galardones y comprado bonos de guerra para financiar sus ambulancias, ella sabía que Los rayos X podían salvar vidas.

Escrito por el IES MACARENA

**Ending:** We have to return, we thank them for inspiring us so much in our eTwinning project and in the search for eTwinning. We thank the first woman to win two Nobel Prizes, one in Physics and one in Chemistry, for her courage, social commitment and bravery in a world where women had very difficult access to scientific research and teaching.