Electric Race

During the rains of 2017, in Piura, a young woman named Sofía decided to go running in the rain. As she ran, she felt a strong tingle in her hair and skin, and looking at herself in a pool of water, she noticed that her hair had stood on end. However, when she touched a pole, her hair returned to her normal state.

What happened is that Sofia's body became electrically charged due to the friction between air and rainwater. This phenomenon is known as the corona effect or spike effect, and it occurs when the sharp points or edges of an object (such as hair) ionize the air around it, creating an electrical charge.

Because Sofia was insulated from the ground and other electrical conductors, the electrical charge built up in her body, causing the tingling sensation and the ruffled effect in her hair.

This story illustrates how a body is electrically charged by friction, as well as the importance of electrical discharge in preventing damage. Other common ways to charge a body include convection, induction, and contact with an electrically charged object, and it is important to be aware of these ways of charging to prevent dangerous situations and safely and effectively harness electricity in our everyday lives.

After reading this story carefully, analyze/research the following questions (you can use the internet):

- How does electric charge affect the objects around us? Can electric charges generate magnetic fields?

- What precautions must be taken to avoid dangerous situations related to electric charge? How can we protect ourselves from electric shocks?

- How important is electric charge in our daily life? What devices or appliances do we use daily that work thanks to electricity?

- What happens when an electrically charged object comes into contact with another object? How is electric charge transferred from one object to another?

- How can the electric charge be harnessed for the benefit of society? Are there technologies or devices that rely on electrical charge to function efficiently?