

STEM Education for Sustainable Development

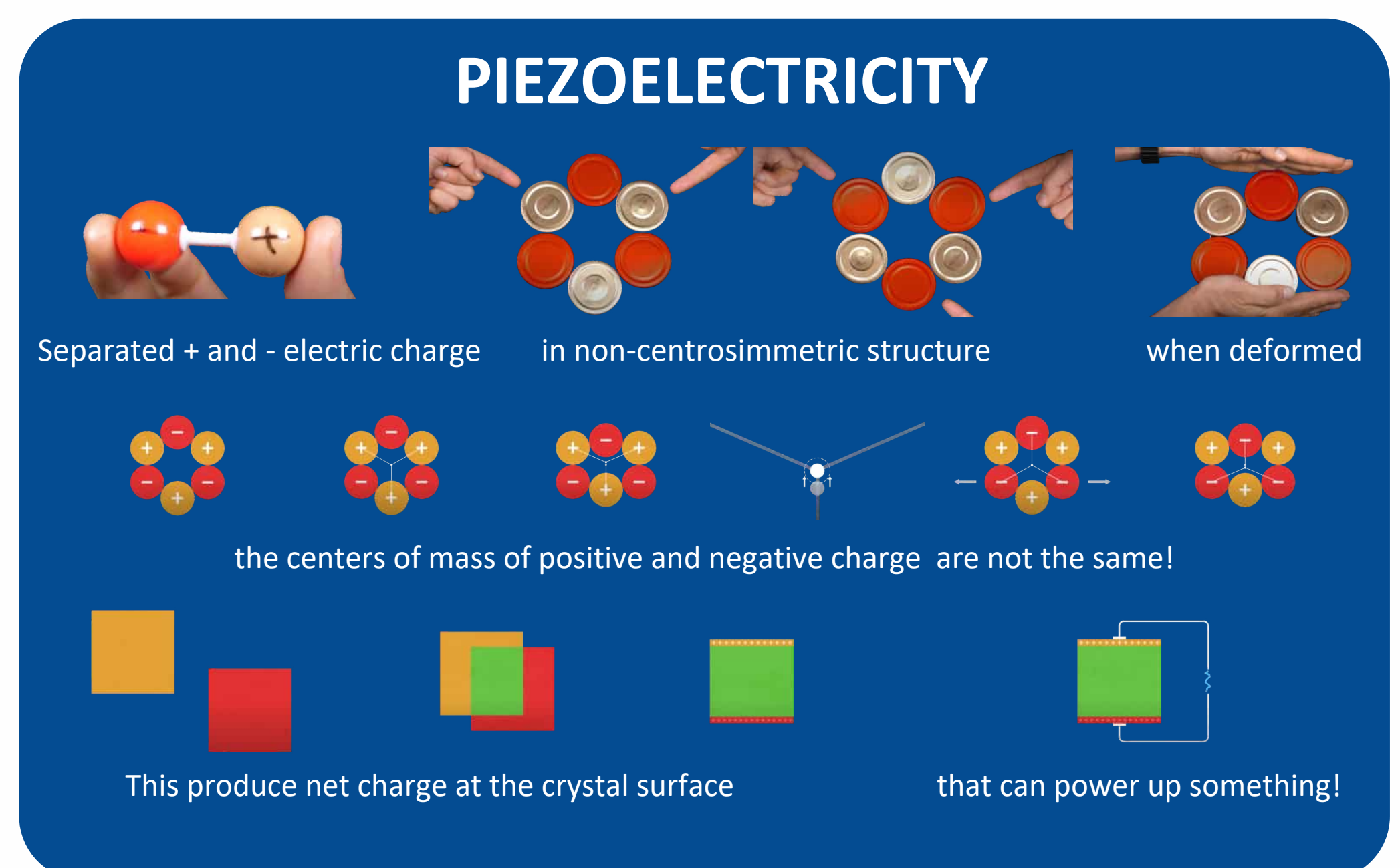


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Good vibrations

Clean and accessible energy for sustainable cities

The use of piezoelectric phenomenon is an innovative solution for energy production and storage. After analyzing the school and neighborhood context, we created two realistic models, piezoelectric step and bump, by placing the circuit inside the MDF panel. The copper wires were connected to the capacitor, which was charged by them, transforming the vibrational energy into electrical energy transferred to the LEDs.



The staircase made up of piezoelectric steps is illuminated by the energy produced thanks to movement. The piezoelectric bump self-produces energy for light signaling thanks to the movement of cars contributing also to road safety.

Why is our project educationally valid?

Because it is a challenging situation, we get our hands dirty developing manual skills and... it is exciting!