

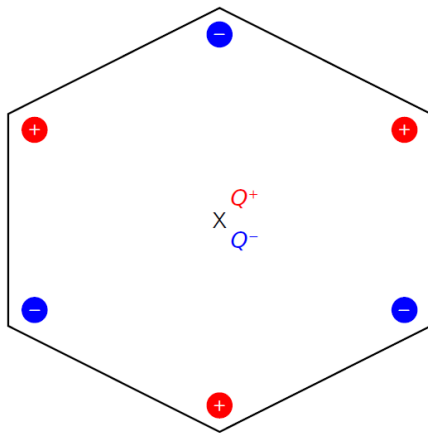
## 1. Before the Experiment

Definition of **piezoelectricity**: \_\_\_\_\_

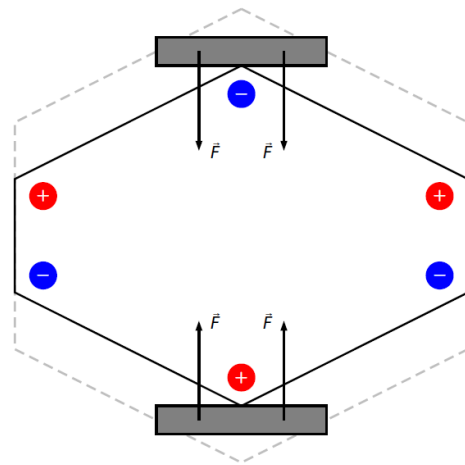
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### Task 1

- a) Complete Figure 2 by constructing the charge concentrations  $Q^+$  and  $Q^-$  of the three positive and the three negative charge concentrations respectively.



**Figure S1.** Piezoelectric substance without a force being applied.



**Figure S2.** Piezoelectric substance when a force  $\vec{F}$  is applied.

- b) In which direction the voltage is formed in Figure 2 – perpendicular, parallel or diagonal to the applied force?

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### Task 2

In addition to the piezoelectric effect, there is a so-called *inverse piezoelectric effect*. Describe it in your own words.

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## 2. After the Experiment

### Task 3

Summarize your observations by noting the relationship between the force exerted and the voltage measured in the following sentence:

The higher the mechanical force on the piezoelectric substance, the \_\_\_\_\_

\_\_\_\_\_.