Sometimes (unfortunately), a bit of physics is needed for chemistry

- Open the following link: <u>Discovering the electrostatic interaction</u>
- Click on the "atomic scale" tab

1. **Propose and implement protocols to quantitatively demonstrate the influence of the charge of each of the entities and the distance between the 2 entities on the interaction between the charged entities**
   - For each study, explicitly define the independent variable, the dependent variable, and at least 2 controlled variables.

2. **Pool the 3 studies to propose an expression for the electrostatic interaction force**

A little help:
   An analogy can be made with an interaction you discovered last year in physics, the gravitational interaction.
   The formula for this interaction is:

$$F_{G\,A/B} = F_{G\,B/A} = G\frac{m_A m_B}{d_{AB}^2}$$