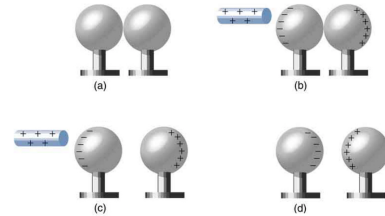


Booklet 9
Electricity

1. Flipped Classroom | **Video** <https://youtu.be/iFcG5ifYvdo>

1. What is electricity?
2. What is charge?
3. What is static electricity?
4. How can you create an imbalance of charge?
5. Explain the four scenarios below:



Hint | <https://youtu.be/Qq2qYTUhWM8>

2. Do Now | **Video** <https://youtu.be/FfptsGbZmX8>

1. What is the difference between static electricity and electric current?
2. How can you create static electricity?
3. How can you create electric current?
4. Explain both scenarios in the video.
5. Why did the peppers stick to the balloon and not the salts?

Hint | <https://youtu.be/FsuXIUb6QXU>

3. Big Idea | **Video** <https://youtu.be/pOt9aoYK-bg>

1. What is gravitational force?
2. What is electric force?
3. Find the gravitational force and its direction on the moon due to Earth.
4. Find the electric force on an electron in the hydrogen atom.
5. What are the differences between gravitational and electric force?

Hint | https://youtu.be/O8_xXn3tb7E

4. Exit Slip | **Video** <https://youtu.be/FobfKxGADLg>

1. What is an electric field?
2. Draw field lines on the following charge(s): (a) positive (b) Negative (c) Positive and Negative (d) Positive and positive (e) Negative and Negative (f) Two positive and a negative.

Hint | <https://youtu.be/u7Q3uMdrAkw>

5. Homework | **Video** <https://youtu.be/W3WhDqm-Olw>

Derive gravitational field and magnetic field equation using Newton's Universal Law of Gravity and Coulomb's Law.

Hint | <https://youtu.be/6ck4uTAN2yU>