Unit 2A – Physics - Static Electricity - Chapter 9

Topic 1: Chapter 9.1: Types of Electric Charge

- Chapter 9.1 reading assignment (summary notes)
- Static Electricity worksheet (this is part of the lesson)
- Do the following lab activities:
 - Activity 9A page 292-293
 - Page 275 "Try This" activity
 - Page 277 "Try This" activity
 - **Note:** For page 275 and 277 activities: read and do all the procedures, and write and draw observations for each procedure. Answer questions A and B
- Do: Page 278 #3, 5 6, 7, 14

Topic 2: Chapter 9.2: Charging by Friction, Conduction, and Induction

Lesson:

- Charging by friction, conduction, induction
- Intro to foil leaf electroscope
- Phet computer simulations:
 - John Travoltage (charging by friction not very educational, but it's fun! make sure the sound is on): https://phet.colorado.edu/en/simulation/john-travoltage
 - Balloons and Static Electricity: https://phet.colorado.edu/en/simulation/balloonsand-static-electricity <u>phet.colorado.edu/en/simulation/balloons-and-static-</u> <u>electricity</u>

Assignment:

- Investigation 9B page 294-295 do all procedures and Analysis questions (a) to (f)
- Page 280 "Try This" activity (this is part of the lesson)
- Page 281 #1, 2, 4, 10

Topic 3: Chapter 9.3: Insulators and Conductors

Lesson:

• Insulators and conductors

Assignment:

• Page 284 #1 to 4, 6, 9

Topic 4: Chapter 9.4: Electric Force

• Van de Graaff generator activity