

# Electrostatics

## Enduring Understanding

- o All electric and magnetic phenomena are due to the motion of charged particles.
- o The distribution of charge determines the strength and form of the electric field.
- o A capacitor is device characterized by its capacity to store an electric charge

## Essential Questions

1. Does quantized charge mean quantized electric field?
2. How does an object acquire a positive charge?
3. What are the similarities and differences between electrostatic and gravitational forces?
4. What are the relationships between charge, electric field and electrostatic force?
5. Is voltage an absolute or relative quantity?
6. Who or what is doing the work?
7. How is the total potential from two or more charges calculated?
8. Can you have an electric field and no electric potential; can you have an electric potential and no electric field?
9. How can capacitance be changed?
10. What do all forms of capacitance have in common?
11. What does a dielectric affect?

