

Module 01 Baseline Quiz

Read sections 5.1 - 5.3

1. When cloth is rubbed against amber, what happens to the amber?
 - a) It remains neutral.
 - b) It becomes negative
 - c) It becomes positive
 - d) None of the above.
2. When cloth is rubbed against amber, what happens to the absolute value of the total charge (charge on the amber and cloth)?
 - a) It decreases.
 - b) It increases.
 - c) It remains constant.
 - d) None of the above.
3. What is the magnitude of the smallest possible charge of a free particle?
 - a) $1.602 \times 10^{-19} \text{ C}$
 - b) $8.99 \times 10^9 \text{ C}$
 - c) None of the above.
4. How do macroscopic objects become 'charged'?
 - a) Protons are added or removed from the object.
 - b) Electrons are added or removed from the object.
 - c) Protons and electrons are transferred to the object.
 - d) None of the above.
5. What happens when a neutral object is brought near a charged object?
 - a) Nothing, it will not be attracted or repelled.
 - b) It depends on the type of charge on the charged object, it may be attracted or repelled.
 - c) It will be repelled.
 - d) It will be attracted.
 - e) None of the above.

6. What happens after a charged conductor is brought into contact with a neutral conductor?
- a) The two conductors will attract each other.
 - b) The two conductors will repel each other.
 - c) Nothing, the conductors will not attract or repel each other.
 - d) None of the above.
7. What is Coulomb's Law?
- a) The law stating that charges are quantized.
 - b) The law stating that charge is conserved.
 - c) The law giving the force between two charges.
 - d) None of the above.
8. What is the principle of superposition?
- a) The idea that two or more electrons cannot occupy the same
 - b) The principle that allows us to calculate the electric force from multiple charges by adding the force from each charge.
 - c) The law giving the force between two charges.
 - d) None of the above.