

Electric Forces and Fields

Section Quiz: The Electric Field

Write the letter of the correct answer in the space provided.

1. Which of the following would be the best to use to determine whether an electric field is present around an object?
 - a magnetized pin
 - light from a lamp
 - a charged table tennis ball
 - a mass suspended from a spring scale
2. Which of the following units is used to state the strength of an electric field?
 - coulombs per cubic meter
 - coulombs per newton
 - newtons per coulomb
 - meters per coulomb
3. The strength of an electric field around a charged object depends on both the magnitude of the charge and
 - the magnitude of a test charge.
 - the sign of the object's charge.
 - the distance from the object.
 - the volume of space around the object.
4. The electric fields of two charges, A and B, are represented by diagrams showing electric field lines. If charge B is greater than charge A, the diagram of charge B will have _____ than the diagram of charge A.
 - more lines per unit area
 - longer field lines
 - straighter field lines
 - more curved field lines
5. The diagram on the right shows the electric field lines around two charges that have been brought near each other. From the diagram you can infer that the charge of the left is _____ than the charge on the right.
 - negative and smaller in magnitude
 - negative and larger in magnitude
 - positive and smaller in magnitude
 - positive and larger in magnitude

