

# AQA A-Level Physics

## 7.3 Electric Fields

### Flashcards



What symbol represents the permittivity  
of free space?



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$\epsilon_0$



When calculating the force between two particles, what can air can be treated as?



When calculating the force between two particles, what can air can be treated as?

A vacuum.



For a charged sphere the charge can be assumed to be at what part of the sphere?



For a charged sphere the charge can be assumed to be at what part of the sphere?

The centre.



Which is stronger? The gravitational force of subatomic particles or the electrostatic force.





Which is stronger? The gravitational force of subatomic particles or the electrostatic force.

The electrostatic force.



Electric field lines always go from \_\_\_\_\_  
to \_\_\_\_\_.



Electric field lines always go from \_\_\_\_\_ to \_\_\_\_\_.

Electric field lines always go from positive charge to negative charge.



# What is electric field strength?



# What is electric field strength?

The force per unit charge acting at a point in an electric field.



What is the magnitude of  $E$  (electric field strength) in an uniform electric field?



What is the magnitude of  $E$  (electric field strength) in an uniform electric field?

Potential difference between plates (V) /  
distance between plates.



What is the trajectory of a particle entering a uniform field at right angles?





What is the trajectory of a particle entering a uniform field at right angles?

It is parabolic.



How is electric potential related to electric field strength?



How is electric potential related to electric field strength?

$$E = \Delta V / \Delta r$$

The change in electric potential with respects to the change in radius length.

