Physics Honors: Electric Fields

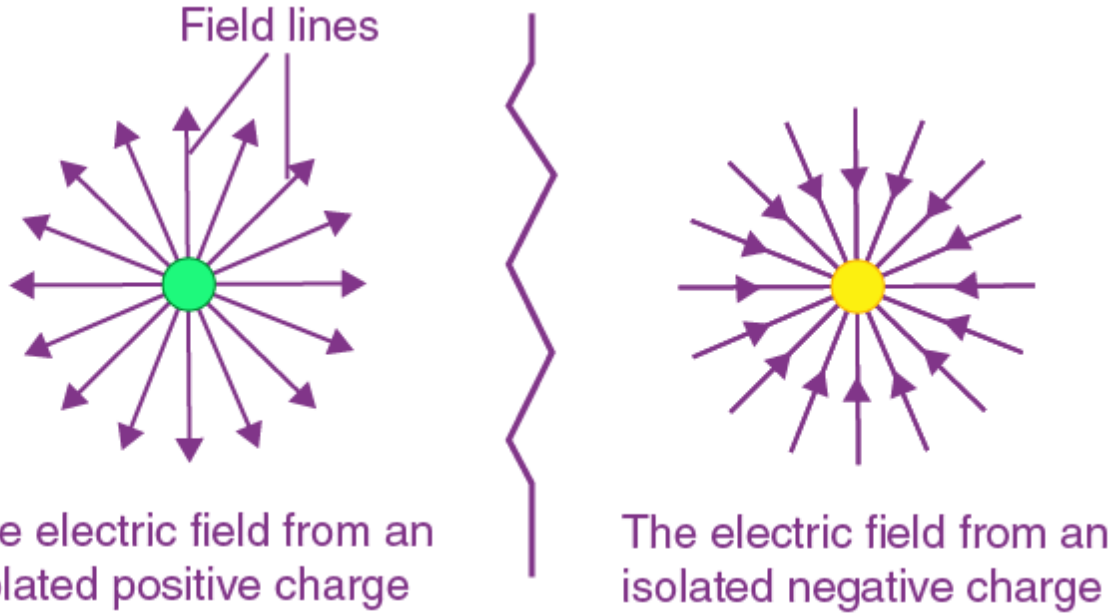
Electric Fields

An electric field is a property of the space around a charged object that exerts forces on other charged objects.

You cannot see an electric field, but there are ways to determine if they are present.

What is an electric field?

We can imagine what a field would act if we put a single positive “test charge” in the field.



How do we determine the strength of an electric field?

The strength of the electric field is equal to the force on a positive test charge divided by the strength of the test charge

$$E = \frac{F}{q}$$

E - Electric Field (N/C - Newtons per Coulomb)

F - Force on test charge (N)

q- strength of charge (C - Coulombs)