

#flo #disorganized #inclass

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electricity! continue later..

## 1 | Continued, later.

unit of len?: newtons/coulomb  $\rightarrow \frac{N}{C}$

no right len to draw, only relative in proportion to the  $r^2$  of the charge

assume pos point when defining electric field

infinite planes, ele fields are the same at any distance "cone" of vision expands when u go farther away

remember || signs when doing comp!

arrow diagram show the path that a test charge would take, not the repulsion

can lines cross?

no. each test particles feel the net field.

### 1.1 | path

- depends on
  - initial velocity
  - and force at time,  $f(t)$
- if started at rest, then it will initially follow the electric field line, then we don't know because the info isn't shown?
- only guaranteed to follow the field line if the lines are parallel away

Estimate the total charge found in the protons of 1 kg of a typical metal. Assume that the mass represents

Your Answer:

$4.790419168 \times 10^7$

What is the net charge of 1 kg of a typical metal? Explain why your answer is different from your answer

Your Answer:

0, as the electrons would cancel the charge from the protons.

In the first question of this series, you assumed that the material's mass was 50% protons and 50% neutrons.

Your Answer:

Hydrogen has just a few more protons than neutrons.

Uranium has more neutrons than protons.