

Re: can someone explain the candela a little?

## Re: can someone explain the candela a little?

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- *From:* Oz <Oz@xxxxxxxxxxxxxxxxxxxxxx>
  - *Date:* Thu, 7 Apr 2005 14:30:09 +0000 (UTC)
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Ralph Hartley <hartley@xxxxxxxxxxxxxxxxxx> writes

>  
>The concept of force existed for thousands of years independent of time,  
>length, and mass. (I don't know what you mean by a \*concept\* existing  
>"in nature")  
>  
>The relationship is a rather recent discovery.

Indeed, Mr Newton.

Personally I would suggest this is not 'recent'.

>Archimedes knew quite a bit about force, but I doubt he used units of  
>mass\*length/time^2 (not "solely" nor "naturally" nor at all). Naturally  
>he used the same units as mass, a practice that survives to this day.

And which causes endless problems with starting mechanics students and probably engineering students to this day. Force is NOT mass.

>The natural relationship between force and mass in normal life is that  
>determined by gravity (on earth).

Yes.

>Produce (in the US) is \*still\* sold by the pound.

Considering how smug americans were during the war because they had a straightforward decimal currency whilst we brits used the archaic LSD, I find their attachment to archaic units hilarious.

>The pound originated  
>as a unit of mass. It was later converted into a unit of force.

Its never been a unit of force (since newton).

The unit of force is (dregs memory) the poundal and IIRC one pound mass weighs 32 poundals.

>At least  
>that's what the textbooks say. It is used far more as a unit of mass. No

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>one \*ever\* uses the "slug".

Its unfortunate to find a physicist using mass as a unit of force.  
I have been skinned alive here for less....

>The Newton is better known, but it's use requires knowing a (non power  
>of ten) constant in a system that otherwise lacks them. That's is one of  
>the (few) advantages of the "English" system: a pound of something  
>weighs one pound. A Kilo weighs 9.?? Newtons, I'd have to look it up.

Its 10 as far as engineers need (9.81)...  
In english  $g=32$  fpss isn't it?

Ye gods its amazing how stuff learned in youth persists...

>Force measuring devices are \*still\* the dominant means of measuring mass.

So what?  
Resistance is the dominant means of measuring light...

>Of course we are now so aware of the relationship between force, mass,  
>length, and time, that it is hard to imagine anyone \*not\* knowing.

Oh yes it is.

>But we now also know the relationship between length and time as well.  
>If you follow your argument to its logical conclusion, you \*must\*  
>advocate the elimination of the meter as well. It is, after all,  
>proportional to the second, not a "different kind of stuff" at all.

I'd be very happy to loose the meter and measure in nanoseconds.  
Of course this works out at about a foot .....

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Oz

This post is worth absolutely nothing and is probably fallacious.

Use oz@xxxxxxxxxxxxxxxxxxxxxx [ozacoohdb@xxxxxxxxxxxxxxxx functions].  
BTOPENWORLD address has ceased. DEMON address has ceased.

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• **References:**

- ◆ **can someone explain the candela a little?**  
    ◇ From: robert bristow-johnson
- ◆ **Re: can someone explain the candela a little?**  
    ◇ From: J. J. Lodder
- ◆ **Re: can someone explain the candela a little?**  
    ◇ From: robert bristow-johnson

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