PHYS102 - Introduction and Charge

Dr. Corcoran
Dr. Suess

January 8, 2007

Introduction

- Welcome to PHYS102.
  - Lab preference sheets need to be submitted to Dr. Dodds's office (HZ Room 109). (There is a box on his file cabinet.)
- Important Changes from PHYS101:
  - The pledged problems are now worth 20% of your final grade (vs. 15%)
  - The final exam is worth 20% of your final grade (vs. 25%)

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History

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  - Charge is an ***intrisic*** property of matter (just like mass).

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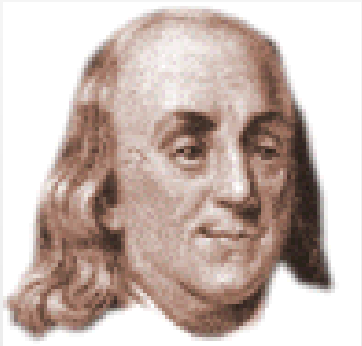

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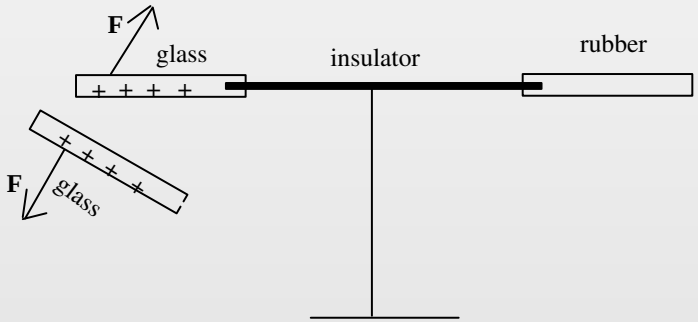

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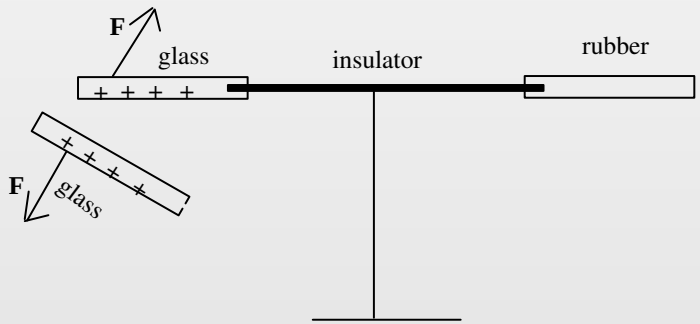

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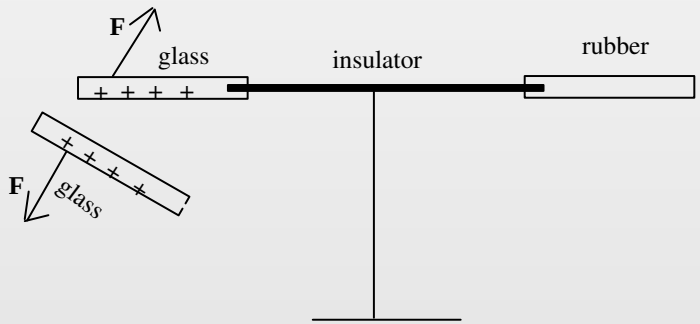

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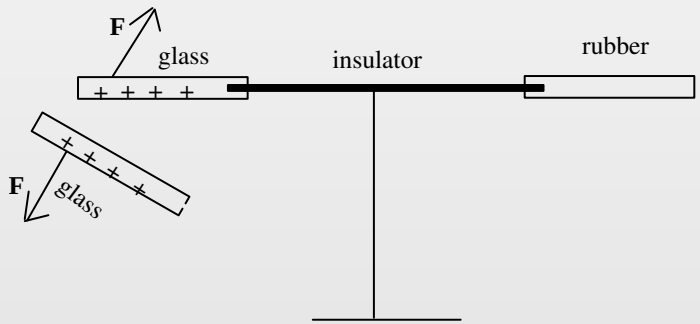

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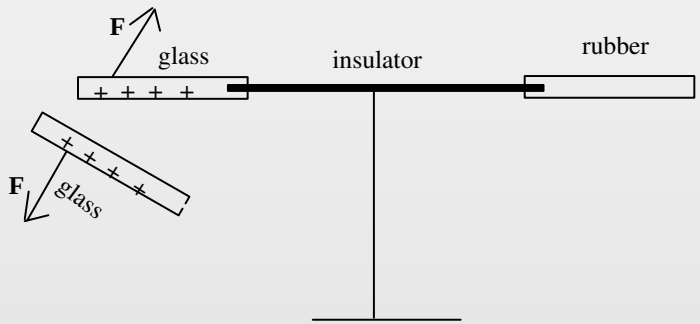

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  - and charges of the opposite sign attract one another.

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NOTE: Charge is treated as a scalar (only a number no direction).

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$\Rightarrow$ Total charge on silk is given by $q_{silk} = -n_e\, e$

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  - Semiconductors - (an example is silicon)