

# Teaching Electrostatics in Introductory Physics: Real values and a Really Useful Notation

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*Abstract*—Sparked by an egregiously unrealistic value given for a “test charge” in an on-line course, a few years ago I took a careful look at charge magnitudes given in problems in 17 introductory physics texts. In the first part of this paper I look at the results and give some realistic values for charges commonly encountered in classroom experiment. In the second part I describe a useful pencil and paper notation for simple modeling of charging processes. This notation emphasizes the role of charge conservation, charge distribution and charge transfer in electrostatic charging.