Weightlessness in Space

Certainly astronauts, whether near or remote from the earth, appear weightless because they are in a free-fall condition. However, whether they really are weightless or not depends on one's definition of weight. Mueller's claim (Letters, 28 July), that the reason for weightlessness during an earth-moon trajectory has nothing to do with decreasing gravitation, is consistent with his definition of weight; however, this definition is not the only one given by dictionaries. For example, the fourth edition of the *Concise Oxford Dictionary* defines weight first as "Force with which body tends to centre of attraction," and, as an example of the word in context, gives the phrase: "the weights of the planets." Since the planets are not restrained from accelerating, they would be excluded from having weight by Mueller's definition. According to the *Concise Oxford Dictionary*, weight is reduced with decreasing gravitation, and very much so during a trip to the moon.

It is not important which definition, if either, is on higher authority. My earlier letter (9 June) was written in the cause of aiding the public understanding of science. This cause is not helped if press releases on science use a common word in an unusual sense without a note of explanation.

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Prominent Noses

In his paper discussing variation in solar ultraviolet at different latitudes as a possible basis of racial differentiation in man (4 Aug., p. 501), Loomis limits himself to the question of skin pigment. It has occurred to me that his theory might be extended to another anatomical feature roughly associated with skin color and with latitude, namely, the prominence of the nose. As so many people on occasion are painfully aware, the nose is without question an outstanding receptor of solar rays. In fact, it is difficult to imagine what other evolutionary reason there could be for the sharply thrust-out nose in the latitudes of lesser solar intensity. . . . As Loomis suggests, the early hominids moving northward into Europe, particularly during warm interglacial periods, may have lost much