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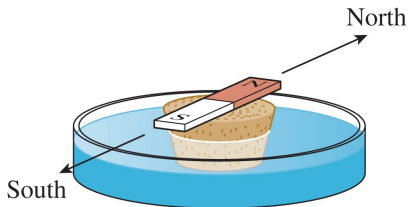
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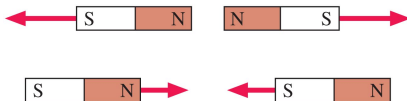
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- Magnetism was also understood in a macroscopic sense before the microscopic basis was known.
- We will try to get a feeling for both the macroscopic and microscopic pictures of magnetism and for the relationship between electricity and magnetism.

Things You Already Know About Magnetism (33.1)



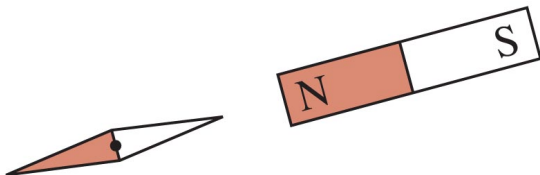
The needle of a compass is a small magnet.

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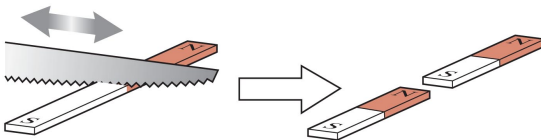


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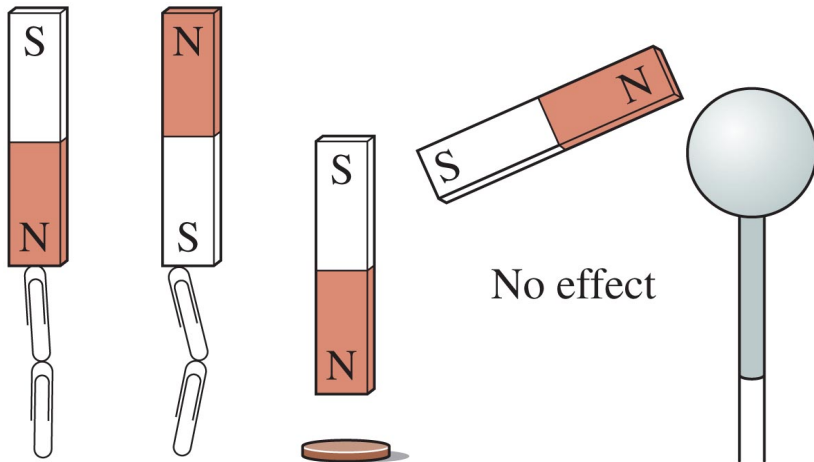


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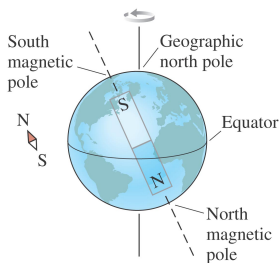


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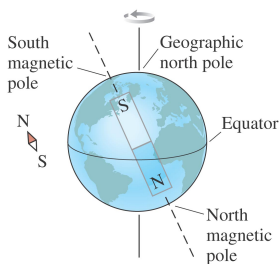
Monopoles, Dipoles and Geomagnetism

- Every magnet which has ever been observed has had both a north and south pole...even if you cut 'em up!



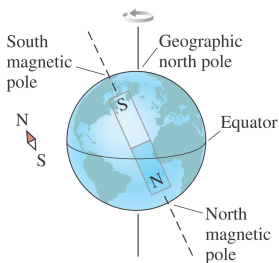
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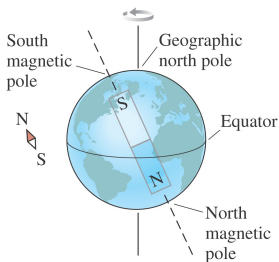
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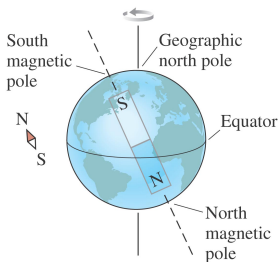
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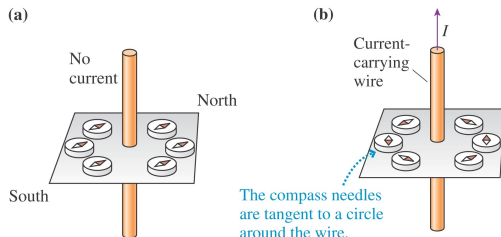
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- This must mean that the geographic north pole of the earth is actually near a magnetic south pole! The north-seeking side of a compass needle would be repelled by a magnetic north pole...

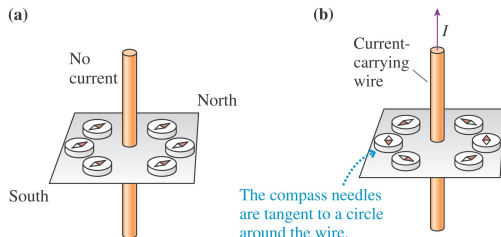
The Discovery of the Magnetic Field (33.2)

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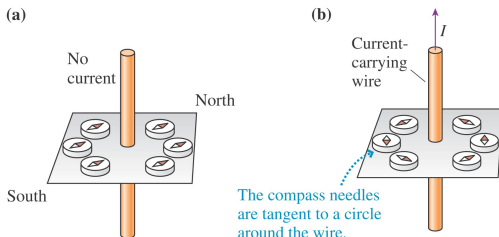
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- Current generates a magnetic field!

