

# Building Projects for Freshman Seminar on How Things Work

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Earth's Field Magnetometer: A laser bounces off of a magnetized mirror to measure variation in the direction of the magnetic field.



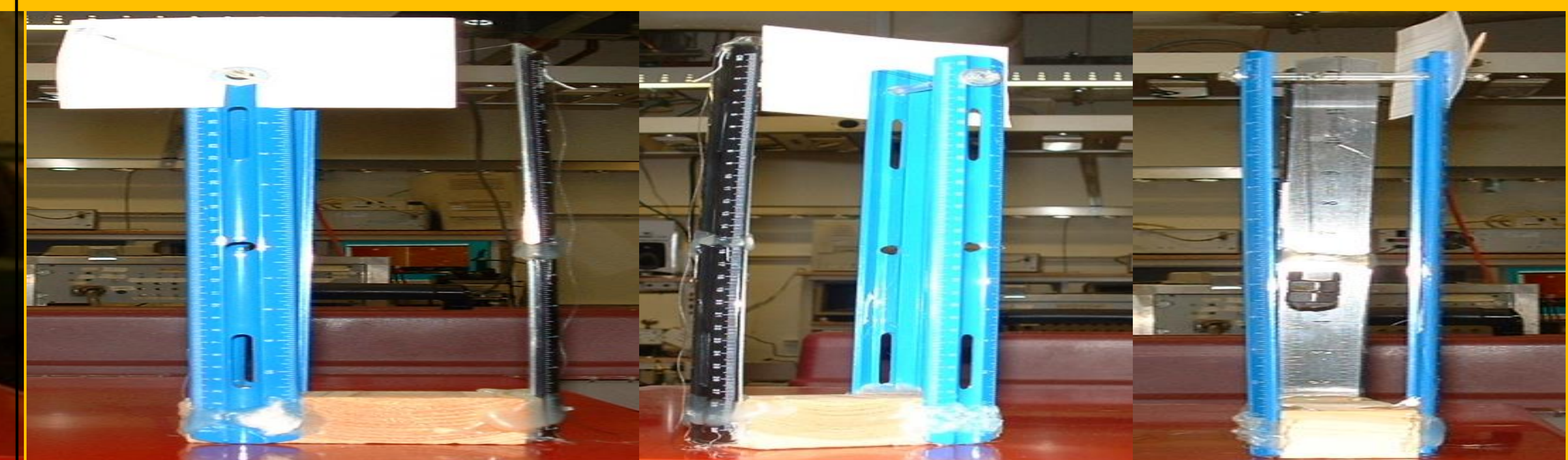
Anemometer: Wind speed is measured by the deflection angle of the ping pong ball measured with the protractor.



Humidity Gauge: Human hair expands and contracts in response to moisture in the air, which rotates the pointer.



Thermometer: Differences in thermal expansion between two paired materials changes needle position to measure temperature.



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