The Nature of Gases

The Kinetic Theory and Nature of Gases

Gases can:

RANDOM MOTION (BROWNIAN MOTION)

MOVE IN STRAIGHT LINES

HUGE SPEEDS

ELASTIC COLLISIONS

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Gas Pressures

Units

760 mm = 1 atm = 101.3 kPa

millimeters atmosphere Pascal

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Gas Pressures

Example: p. 387 # 2

GIVEN

760 mm = 1 atm = 101.3 kPa

x 33.7 kPa

.332 atm > .25 atm

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Kinetic Theory and Temperature

Relationship between the two

KINETIC ENERGY => MOVING ENERGY

KE ↑ TEMPERATURE ↑

KE ↓ TEMPERATURE ↓

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Dec 22-5:04 PM