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Pascal

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Why Clean Up Water

Forty percent of the United States Water supply is, in part, drawn from water that has been used for industrial or domestic purposes.

Environmental Vistas

1976, Vol. 9 (1):9.

* * *

Please, Check My Pascals!

Conversion to metric units will involve more than meters, liters and grams. For example, one metric derived unit of pressure is the pascal (Pa) and is equal to one newton per square meter. Its multiple, the kilopascal (kPa) may become a commonly used measure of tire pressure. Table 1 shows the approximate equivalents of tire pressure measured in pounds per square inch (psi) when converted to kilopascals.

Table 1

Tire Pressure

Current Usage (psi)	Equivalent Usage (kPa)
15	105
20	140
25	170
30	205

Adapted from *The Colorado Science Teachers Association Newsletter*.

* * *

Pascal

Pascal, a French mathematician and physicist, was born on June 18, 1623. Pascal was an infant prodigy. His father, a mathematician, supervised his education and denied him any books on mathematics in his early childhood.

At sixteen years of age, Pascal published a geometry book on conic sections which Descartes refused to believe could be written by a sixteen-year-old. At eighteen he invented the forerunner of the modern cash register by constructing a calculating machine that could add and subtract. With Fermat, he discovered the modern theory of probability in response to solving a gambling problem. Pascal also worked with fluids and invented the hydraulic press. In addition, he clarified Galileo's and Torricelli's views concerning atmospheric pressure.

Pascal was chronically sick, suffering from indigestion and insomnia. In 1646, he came under the influence of Jansenism (a religious sect). He terminated his work on science and mathematics problems and in his declining years declared reason an insufficient tool for understanding the physical universe.