

# X

**xeno currency market.** See eurocurrency.

**xenon.** An inert gas which has many *\*isotopes*, both naturally occurring and radioactive. The most important in nuclear reactors is xenon-135, which is produced as a *\*fission product*. It has a very high neutron capture *\*cross-section* and acts as a *\*reactor poison*.

Symbol: Xe; atomic number: 54; atomic weight: 131.3.

DB

**X-rays.** High-energy *\*electromagnetic radiation*, but less energetic than *\*gamma radiation*, which is emitted from

atoms as the result of changes in electron energy levels.

DB

**xylene.** An aromatic hydrocarbon,  $C_6H_4(CH_3)_2$ , in which two of the hydrogen atoms in the *\*benzene ring* have been replaced by methyl groups. It may be obtained by the distillation of coal or by the *\*catalytic reforming* of *\*straight-run petroleum fractions*. It occurs in three isomeric forms (ortho-, meta-, and para-) which have similar properties. All are flammable. It has a gross calorific value of 43.4 MJ/kg.

WG