

Graphs in Chemistry

Chemistry

Plotting and interpreting the standard graph types.

What the gradient means in each common plot.

Plot	Gradient is
Volume of gas against time	Rate of reaction
Concentration against time	Rate (negative for reactant)
$\ln k$ against $1/T$	$-E_a/R$
Absorbance against concentration	ϵl (Beer-Lambert)
$1/[A]$ against time	k , if second order
$\ln[A]$ against time	$-k$, if first order

A straight line for $\ln[A]$ against time confirms first order. A straight line for $1/[A]$ against time confirms second order.