## mathcentre communit<sup>y</sup> project

## **Resource Wishlist**

Resources requested by mathcentre users <sup>1</sup>	Notes
3D geometry	
Angular velocity	
Calculus for kinematics	
Centre of mass	
Centroids	
Complex analysis - introduction	
Continuity equation	
Continuous functions - determination ie. piecewise	
Decision mathematics	Higher level materials
Derivation of formulae	
Differential equation - homogenous equations	
Dimensional analysis	
Discrete mathematics	Logic, sets
Dynamics	
Energy	Topic related problems
Forces in a framework; conditions for equilibrium	
Fourier series	
Functions defined parametrically	
General form of the fundamental theorem of algebra	
Geometry	
Great solved and unsolved problems	
Group theory	
Integration for finding volumes of revolution or surface	
Interactive transposition for exponential, log and trig functions	
Line integrals	
Linear algebra	
Linear programming	
Material for vocational learners	
Materials for lower entry level learners	

<sup>&</sup>lt;sup>1</sup> mathcentre user survey conducted January – June 2011

Mathematics for Biology	Topic related problems
Mathematics for Chemistry	Topic related problems
Mathematics for Computer programming	Topic related problems
Mathematics for Economics	Topic related problems
Mathematics for Electronics	Topic related problems
Mathematics for Engineering	Practical problems
Mathematics for Pharmacy	Topic related problems, drug calculations
Mathematics for Physics	Topic related problems
Mathematics for Thermodynamics	Topic related problems
Mean, mode, median	
Moments of forces	
Number theory - congruences, linear Diophantine equations	
Numerical analysis	
Problem solving techniques for functional maths	
Problem solving techniques for open response questions	
Proof by contradiction	
Proof examples	
Relative velocity	
Tessellations	
Using a scientific calculator	
Vector calculus	
Work and energy	Topic related problems