

Resource sheet 5: Long and medium term planning

Model A

Pathway		Stage	Lines of progression	Pitch
3 to 5	4 to 6	1	All: Y4/5	Consolidating level 3 and introducing level 4
			Most: Y5/6	
			Some: Y7	
	5 to 7+	2	All: Y5/6	Consolidating level 4 and introducing level 5
			Most: Y7	
			Some: Y8	
5 to 7+	3	All: Y7	Consolidating level 5 and introducing level 6	
		Most: Y8		
		Some: Y9		
5 to 7+	4	All: Y8	Consolidating level 5, mostly level 6 and introducing some level 7	
		Most: Y9		
		Some: Y10		
5 to 7+	5	All: Y9	Securing level 7 and introducing level 8	
		Most: 10		
		Some: Y11		

Sequences, functions and graphs: using ICT (stage 2)

All

- Identify the necessary information to understand or simplify a context or problem
- Express simple functions in words, then using symbols; represent them in mappings
- Generate coordinate pairs that satisfy a simple linear rule; plot the graphs of simple linear functions, where y is given explicitly in terms of x , on paper and using ICT; recognise straight-line graphs parallel to the x -axis or y -axis
- Plot and interpret the graphs of simple linear functions arising from real-life situations, e.g. conversion graphs

Most

- Identify the mathematical features of a context or problem
- Express simple functions algebraically and represent them in mappings or on a spreadsheet
- Generate points in all four quadrants and plot the graphs of linear functions, where y is given explicitly in terms of x , on paper and using ICT; recognise that equations of the form $y = mx + c$ correspond to straight-line graphs
- Construct linear functions arising from real-life problems and plot their corresponding graphs; discuss and interpret graphs arising from real situations, e.g. distance–time graphs

Some

- Break down substantial tasks to make them more manageable
- Find the inverse of a linear function
- Generate points and plot graphs of linear functions, where y is given implicitly in terms of x (e.g. $ay + bx = 0$, $y + bx + c = 0$), on paper and using ICT; find the gradient of lines given by equations of the form $y = mx + c$, given values for m and c
- Construct functions arising from real-life problems and plot their corresponding graphs; interpret graphs arising from real situations, e.g. time series graphs