Year 10 Objective List – Foundation HT5

Pythagoras and Trigonometry:

Objective	Sparx Task	
Use Pythagoras' theorem in 2D (including surds)	U385	
Apply Pythagoras in different contexts such a coordinate geometry and with a range of shapes and units		
Recall the trigonometric ratios for Sine, Cosine and Tangent	U605	
Use trig to find a missing length in a right angled triangle	U283	
Use trig to find an angle in a right angled triangle (includes angles of elevation/depression)	U545	
Solve problems using trigonometry/Pythagoras that incorporate other aspects of the syllabus such as area and perimeter.		
Know the exact trig angles for 0,30,45, 60 and 90 for all three trig ratios (excluding tan90)	U627	

Elevations, Constructions, Loci and Bearings:

Objective	Sparx Task	
Draw front/side elevations, plan views and understand the 3D solid that they have come from	U743	
Understand the properties of 3D solids including, faces, edges, vertices and be able to sketch/count planes of symmetry	U719	
Construct three different types of triangles (SAS, ASA and SSS)	U187	
Construct perpendicular bisectors and angle bisectors	U245 U979	
Understand the term locus (loci) and be able to sketch simple loci	U820	
Construct loci a fixed distance from a point or a line	U820	
Construct loci equidistant between two points or two lines	U820	
Show how the above loci can be used to define regions 'nearer to or 'greater than'	U820	

Accurately draw and measure bearings that may incorporate a scale	U525	
Use angle rules to calculate bearings	U164	
Solve loci problems that may involve bearings		