Year 10 Objective List – Higher   HT3 – 2022-23

Angles, Polygons, Pythagoras and Trigonometry

Objective	Sparx Task	
1.Apply simple angle rules including angles sums in triangles and quadrilaterals	U390 U628 U730	
2.Apply parallel line angle rules	U826	
3.Classify triangles and quadrilaterals and understand geometric properties	U732 U329 U655	
4.Name polygons and solve problems involving interior and exterior angles	U427	
5.Understand and apply Pythagoras' theorem in 2D	U385	
6.Use Trigonometry to find missing lengths and angles	U283 U545	
7.Solve problems including multi-step questions using Pythagoras and Trigonometry		
8.Know exact Trig angles for 0,30,45,60,90 (excluding tan90) and apply to problems	U627	
9. Understand proof of angles rules		
10. Use angle properties of shapes to solve problems involving algebra		
11. Find angles of elevation and depression	U967	

Further Trigonometry & Trigonometric Graphs

Objective	Sparx Task	
1.Know and use the sine rule in 2D (including bearings problems)	U952	
2.Know and use the cosine rule in 2D (including bearings problems)	U591	
3.Apply the sine and cosine rules to 3D problems	U170	
4.Know and apply the trig area formula to find areas, sides or angles		
5.Use trigonometry to find lengths and angles between planes within solids.	U460	
6.Recognise, sketch and interpret graphs of the three trigonometric functions	U450	
7.Know exact values of sin, cos and tan for 0, 30, 45, 60 and 90 degrees (excluding tan 90)	U627	

8.Understand reflections of the graphs of sin, cos and tan in the x-axis and y-axis		
9.Understand translations of the graphs of sin and cos in the x-axis and the y-axis		