

# PERSONALISED LEARNING CHECKLIST

Year 9 – White Rose Maths

CM  
Link

Sparx  
Link

Red

Amber

Green

Revised  
(Tick)

## Areas of Study:

### Topic 1: Straight line graphs

Autumn Term

1	Understand gradients & intercepts (Q3&5)	189-190					
2	Find and plot equations of lines including those in the form $y=mx+c$ (Q1,2&6)	186-187	U315				
3	Real life graphs (Q7&Q8)	171a	U638				
<b>Topic 2: Forming and solving equations</b>							
4	Solve one and two step equations including unknowns on both sides (Q1&2&4)	110,113	U755 U325 U870				
5	Solve inequalities (Q3&Q5)	176	U759				
6	Rearranging formulae (one and two step) (6&7)	7	U181 U675				
<b>Topic 3: Testing conjectures</b>							
7	Expand single and double brackets (Q5)	13-14	U179 U768				
8	Factors, primes and multiples (Q1&Q2)	216,20,225	U211 U236				
<b>Topic 4: Three dimensional shapes</b>							
9	3D shapes including nets, faces, edges and vertices (Q1,2 &3)	3-5	U716 U719				
10	Plans and elevations (Q5)	354	U743				
11	Surface area of cube, cuboids, triangular prisms, cylinders (Q7)	310-311,315	U259 U929				
12	Volume of cubes, cuboids, prisms and cylinders (Q4,6&8)	355-357	U174 U786				
<b>Topic 5: Constructions and congruency</b>							
13	Scale drawings (Q2)	283-284	U257				
14	Loci from a point and straight lines (Q8)	75-77	U820				
15	Construct perpendicular and angle bisector (Q5,6&7)	78-79	U245, U787				
16	Construct triangles (Q4)	81-83	U187				
17	Identify congruent shapes and triangles (Q3&9)	66-67	U790, U866				

Topic 6: Numbers							Spring Term
18	Work with directed numbers and standard form (Q2,4,6&8)						
19	Solve problems with integers, decimals and fractions (Q1&7)	90-91	M152 M347 M429 M928				
20	Add, subtract, multiply and divide fractions (Q3)	132-134, 142	M110 M157 M835				
Topic 7: Using percentages							
21	Percentage increase and decrease (Q2,3,6, 9&10)	238					
22	Percentage change (Q8)	233	M476				
23	Solve reverse percentage problems with and without a calculator (Q4,5&7)	240	M528				
Topic 8: Maths and money							
24	Bank statements and best buys (Q1&5)	210 400i	M681				
25	Calculate simple and compound interest including VAT (Q2,6,7&8)	236-236a	M901				
26	Solve problems with exchange rates (Q4)						
Topic 9: Deduction							
27	Angles facts (Q1&3)	30 33 35					
28	Angle in parallel lines (Q2)	25	M606 M679				
29	Conjecture with shapes and angles (Q4,5&6)						
Topic 10: Rotation and translation							
30	Rotational symmetry (Q1&5)	317	M523				
31	Rotations (Q3&9)	275	M910				
32	Translations (Q2,4,8&9)	325-326	M139				
33	Reflections (Q7&6)	272-274	M290				
Topic 11: Pythagoras' theorem							
34	Identify the hypotenuse on a right angled triangle		M677				
35	Calculate the missing side on a right angled triangle (Q1-7)	257 263	M480				

**Topic 12: Enlargement and similarity**

Summer Term

36	Recognise enlargement & similarity (Q1&3)	104 292	M178 M377				
37	Enlarge shapes by a positive and fractional scale factor (Q2,4,5&7)	104 107	M178				
38	Find missing sides and angles for similar shapes (Q6)	292	M324				

**Topic 13: Solve ratio & proportion problems**

39	Solve problems with direct and inverse proportion (Q1,2&4)	254- 255	M478				
40	Use conversion graphs	151- 152					
41	Solve ratio and best buy problems (Q3,5,6&7)	210 271- 271b	M525				

**Topic 14: Rates**

42	Solve speed, distance, time problems (Q1-4&8,10)	299	M247				
43	Use distance time graphs (Q5)	171	M221				
44	Solve density, mass and volume problems (Q7&9)	384	M910				
45	Interpret rates of change (Q6)	390b	U256				

**Topic 15: Probability**

46	Find the probability of a single event (Q1&3&4)	245	U408				
47	Find relative frequency (Q2)	248	U166				
48	Expected outcomes and independent events (Q6)	249					
49	Tree diagrams and diagrams to work out probabilities (Q5&7)	252 319	U558				

**Topic 16: Algebraic representation**

50	Draw and interpret quadratic graphs (Q1)	264- 265	U667 U989				
51	Interpret other graphs including reciprocals (Q2&6)	344- 346	U593				
52	Represent inequalities (Q3,4&5)	180- 181	U747				