

Scheme Of Work 2019 - 2020

Subject: Maths

Year Group: 8

Specification: KS3 Maths Progress Delta

Active Learning Opportunities

Stretch & Challenge (NACE)

Year 2

Lesson No	Topic & Objectives	Key Activities & Specialist Terminology	Big Think Q's & Stretch	GCSE Q Stem	Homework
12hrs	Real life graphs				
30	Recognise when values are in direct proportion.	4.1 Direct proportion	The weight of a piece of wire is directly proportional to its length. A piece of wire is 25 cm long and has a weight of 6 grams. Another piece of the same wire is 30 cm long.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 45-51			

31	Plot graphs and read values to solve problems.	<p>Do Now: Numeracy Ninja Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i></p>	Calculate the weight of the 30 cm piece of wire	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 45-51	Related question teacher judgement		
32	Interpret graphs from different sources.	4.2 FINANCE: Interpreting financial graphs	This is part of a graph to change between New Zealand Dollars (NZ\$) and Pounds (£).	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 45-51	Use the graph to help convert 30		

33	Understand financial graphs.	<p>Do Now: Numeracy Ninja Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i></p>	<p>Use the graph to help convert 50 New Zealand Dollars (NZ\$) into Pounds (£).</p>	<p>TEQ - Show understanding of worded questions and how marking schemes test working practices</p>	<p>Monopolise your homework Sheet 4</p>
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 45-51	Related question teacher judgement		
34	Draw and interpret distance–time graphs.	4.3 Distance-time graphs	<p>Bethany drove to a family meal and then back home. The meal was at a restaurant that is 70 kilometres from her home. Bethany left home at 10:00 and arrived at the restaurant at 11:30. She stayed at the family meal for 2 hours. Bethany then drove home at a speed of 35 kilometres per hour. Show this information on the distance-time graph.</p>	<p>TEQ - Show understanding of worded questions and how marking schemes test working practices</p>	<p>Monopolise your homework Sheet 4</p>
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 45-51	Related question teacher judgement		

35	Use distance–time graphs to solve problems.	<p>Do Now: Numeracy Ninja Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc</p>	<p>Anil cycled from his home to the park. Anil waited in the park. Then he cycled back home. Here is a distance-time graph for Anil’s complete journey.</p> <p>At what time did Anil leave home? What is the distance from Anil’s home to the park?</p>	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 45-51	Related question teacher judgement		
36	Interpret graphs that are curved.	4.4 Rates of change	<p>The graph shown can be used to convert between pounds and euros. Use the graph to change £350 to euros Use the graph to change 210 euros to £</p>	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 45-51	Related question teacher judgement		

37	Interpret real-life graphs.	<p>Do Now: Numeracy Ninja</p> <p>Plenary: TEQ (Typical exam question)</p> <p>Show me boards, Coaching, Independent Study, Student teachers etc</p>	<p>Rebecca rollerbladed from her home to the playground.</p> <p>Rebecca rested in the playground for some time.</p> <p>She then rollerbladed home.</p> <p>Here is a distance-time graph of Rebecca's journey.</p> <p>How long did it Rebecca take to rollerblade from her home to the playground?</p>	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 45-51	Related question teacher judgement		
38	Understand when graphs are misleading.	4.5 Misleading graphs	What is wrong with the information represented on this graph?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4
Lesson No	Topic & Objectives	Key Activities & Specialist Terminology	Big Think Q's & Stretch	GCSE Q Stem	Homework
12hrs	Transformations				

39	Describe and carry out translations.	5.1 Reflection and translation	Triangle A is reflected in the x-axis to give triangle B. Draw the triangle B and label it B.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 28-41	Related question teacher judgement		
40	Describe and carry out reflections.	Do Now: Numeracy Ninja Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc	Triangle B is reflected in the line $x = 1$ to give triangle C. Draw the triangle C and label it C	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 28-41	Related question teacher judgement		

41	Describe and carry out rotations.	5.2 Rotation	On the grid, rotate triangle A 180° about O. Label your new triangle B.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 28-41	Related question teacher judgement		
42	Enlarge a shape.	5.3 Enlargement	On the grid, enlarge the shaded shape by scale factor of 2, centre (1,1).	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 28-41	Related question teacher judgement		

43	Describe an enlargement.	<p>Do Now: Numeracy Ninja Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i></p>	<p>If an enlargement causes the shape to become smaller, the scale factor is _____. A) less than 1 B) equal to 1 C) Greater than 1</p>	<p>TEQ - Show understanding of worded questions and how marking schemes test working practices</p>	<p>Monopolise your homework Sheet 5</p>
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 28-41	Related question teacher judgement		
44	Enlarge a shape using negative scale factors.	5.4 More enlargement	<p>Enlarge the shaded triangle by a scale factor 1 , centre P.</p>	<p>TEQ - Show understanding of worded questions and how marking schemes test working practices</p>	<p>Monopolise your homework Sheet 5</p>
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 28-41	Related question teacher judgement		

45	Enlarge a shape using fractional scale factors.	<p>Do Now: Numeracy Ninja Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i></p>	Enlarge the triangle ABC by a scale factor of about the centre of enlargement O.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 28-41	Related question teacher judgement		
46	Transform 2D shapes using a combination of reflection, rotation, enlargement and translation.	5.5 STEM: Combining transformations	<p>Shape P is reflected in the line $x = -1$ to give shape Q. Shape Q is reflected in the line $y = 0$ to give shape R.</p> <p>Describe fully the single transformation that maps shape P onto shape R.</p>	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 28-41	Related question teacher judgement		

	Identify planes of reflection symmetry in 3D solids.	5.6 2D shapes and 3D solids		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
47					
S & C	Pixl Maths Aiming for grade 1	Excercises from pages 28-41			
	Find the perimeter and area of 2D shapes after enlargement.	Do Now: Numeracy Ninja Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	Shade two more triangles to make a pattern with 1 line of symmetry.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
48					
S & C	Pixl Maths Aiming for grade 1	Excercises from pages 28-41			

	Find the volume of 3D solids after enlargements.	<p>Do Now: Numeracy Ninja</p> <p>Plenary: TEQ (Typical exam question)</p> <p>Show me boards, Coaching, Independent Study, Student teachers etc</p>		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5
49					
Lesson No	Topic & Objectives	Key Activities & Specialist Terminology	Big Think Q's & Stretch	GCSE Q Stem	Homework
12hrs	Fractions, decimals & percentages				
	Recognise fractional equivalents to important recurring decimals	6.1 Recurring decimals	Write 1.54 as a fraction. (4 is recurring)	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 6
50					
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 55-59	Related question teacher judgement		

51	Recognise which denominators of simple fractions produce recurring decimals	<p>Do Now: Numeracy Ninja</p> <p>Plenary: TEQ (Typical exam question)</p> <p>Show me boards, Coaching, Independent Study, Student teachers etc</p>	
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 55-59	
52	Change a recurring decimal into a fraction.	<p>Do Now: Numeracy Ninja</p> <p>Plenary: TEQ (Typical exam question)</p> <p>Show me boards, Coaching, Independent Study, Student teachers etc</p>	
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 55-59	

	Write 0.77.. as a fraction in its lowest terms.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 6
		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 6
	Related question teacher judgement		

53	Calculate percentages	6.2 Using percentages	<p>In April 2004, the population of the European Community was 376 million.</p> <p>In April 2005, the population of the European Community was 451 million.</p> <p>Work out the percentage increase in population.</p> <p>Give your answer correct to 1 decimal place.</p>	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 6
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 55-59	Related question teacher judgement		
54	Work out an original quantity before a percentage increase or decrease	<p>Do Now: Numeracy Ninja</p> <p>Plenary: TEQ (Typical exam question)</p> <p>Show me boards, Coaching, Independent Study, Student teachers etc</p>	<p>An antique is sold for £550 which is a 10% increase on the price that it was originally bought for. How much was the antique originally bought for?</p>	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 6
S & C	Pixl Maths Aiming for grade 1	Exercises from pages 55-59	Related question teacher judgement		

55	Calculate percentage change.	6.3 Percentage change	Find the percentage decrease From £980 to £343	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 6
S & C	Pixl Maths Aiming for grade 1	Exercices from pages 55-59	Related question teacher judgement		
56	Calculate the effect of repeated percentage changes.	6.4 FINANCE: Repeated percentage change	If you deposit £1,000 in a bank account which is paying 3% compound interest per year. How much interest would be earned over 3 years?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 6

Lit Num SMSC Codes
So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

Lit Num
SMSC Codes

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

Lit Num
SMSC Codes

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9

So2, So6,
So7 , M1,
C3, C5, C6 ,
Sp2 Sp9