

Scheme Of Work 2020-2021

Subject: Maths

Year Group: 9 (Year 1 of 3)

Specification: Edexcel Foundation GCSE

Active Learning Opportunities

Stretch & Challenge (NACE)

Foundation

Lesson	Topic & Objectives	Key Activities & Specialist Terminology	Big THINK Q's & Stretch	GCSE Q Stem	Homework	Lit Num SMSC Codes
	Designing tables and data collection sheets. Reading data from tables.	3.1 Frequency tables Do Now: 5-A-Day	example of the sure that your data is	TEQ - SHOW understanding of TEQ - SHOW understanding of	your your	So2, So6, So7 M1
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Use data from tables. Design and use two-way tables.	3.2 Two-way tables Do Now: 5-A-Day	Calculate the: 1. Mode 2. Median	TEQ - SHOW understanding of TEQ - SHOW understanding of	your your	So2, So6, So7 M1
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Draw and interpret comparative and composite bar charts. Interpret and compare data shown in bar charts, line graphs and	3.3 Representing data Do Now: 5-A-Day	Create a hypothesis and prove with the use of data presented	TEQ - SHOW understanding of TEQ - SHOW understanding of	your your	So2, So6, So7 M1
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Plot and interpret time series graphs. Use trends to predict what might happen in the future	3.4 Time series Do Now: 5-A-Day	Plot a Time series graph for your commute to school.	TEQ - SHOW understanding of TEQ - SHOW understanding of	your your	So2, So6, So7 M1
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Construct and interpret stem and leaf and back-to-back stem and leaf	3.5 Stem and leaf diagrams	How many people were in the sample?	TEQ - SHOW understanding of	your	So2, So6, So7 M1

	Draw and interpret pie charts.	3.6 Pie charts	Explain what the benefits and weaknesses of a pie chart.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 3	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
		Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	How are angle calculations used in pie charts	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 3	
		Calculate percentages from angles within a pie chart	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 3	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9	
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Plot and interpret scatter graphs.	3.7 Scatter graphs	Ice cream sales and shark attacks are	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 3	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9

	Determine whether or not there is a relationship between sets of data.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc	<small>small attacks are</small> linked. How?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 3	
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
	Draw a line of best fit on a scatter graph. Use the line of best fit to predict values.	3.8 Line of best fit Do Now: 5-A-Day Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc	Use line of best fit to predict answers from sets of data.	TEQ - Show understanding of worded questions and how marking schemes test working practices TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 3 Monopolise your homework Sheet 3	So2, So6, So7, M1, C3, C5, C6, Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
Lesson No	Topic & Objectives	Key Activities & Specialist Terminology	Big Think Q's & Stretch	GCSE Q Stem	Homework	Lit Num SMSC Codes

		4.1 Working with fractions	What is 3 as a fraction of 15? What is $\frac{3}{4}$ of 1?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
		Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	Simplify . 100/200	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	
			1. Convert from mixed to improper.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	
			2. Convert from improper to mixed	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,

	Find a fraction of a quantity or measurement.	4.2 Operations with fractions	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 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
	Use fractions to solve problems.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>		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 +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
	Multiply whole numbers, fractions and mixed numbers.	4.3 Multiplying fractions	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 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
	Simplify calculations by cancelling.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	

				TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Divide a whole number by a fraction. Divide a fraction by a whole number or a fraction.	4.4 Dividing fractions Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	Divide into a fraction that contains mixed number, improper fractions and more complicated use of BODMAS.	TEQ - Show understanding of worded questions and how marking schemes test working practices TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4 Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Convert fractions to decimals and vice versa.	4.5 Fractions and decimals		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9

	Use decimals to find quantities.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	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 4	
	Write one number as a fraction of another.			TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Convert percentages to fractions and vice versa.	4.6 Fractions and percentages	In April 2004, the population of the European Community was 376 million. In April 2005, the population of the European Community was 451 million. Work out the percentage increase in population.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	
	Write one number as a percentage of another.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,

	Convert percentages to decimals and vice versa.	4.7 Calculating percentages 1		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	
	Find a percentage of a quantity.	<p>Do Now: 5-A-Day</p> <p>Plenary: TEQ (Typical exam question)</p> <p>Show me boards, Coaching, Independent Study, Student teachers etc</p>	If you deposit £1,000 in a bank account which is paying 3% compound interest per year.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
	Use percentages to solve problems.		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 4	
	Calculate simple interest.	<p>Do Now: 5-A-Day</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 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,

	Calculate percentage increases and decreases.	4.8 Calculating percentages 2		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	
	Use percentages in real-life situations.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	Answer Best buys questions from GCSE papers. Identify multipliers used to calculate increase and decreases.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 4	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
	Calculate VAT (value added tax).			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 +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
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	Understand and use inverse equations.	5.1 Solving equations 1	What is the difference between \equiv and $=$?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
	Rearrange simple linear equations.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	Where does the name 'algebra' come from?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	
	Solve simple linear equations.		Use the comparing and contrasting thinking map to compare equations to expressions- present in groups	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
	Solve two-step equations.	5.2 Solving equations 2	Can you solve a weight problem with	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9

		<p>Do Now: 5-A-Day Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc</p>	weight problem with two unknowns?	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 +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
	Solve linear equations with brackets.	5.3 Solving equations with brackets	Evaluate equations with unknowns on both sides that have larger coefficients and will lead to fractional values for the variables.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7, M1, C3, C5, C6, Sp2 Sp9
	Solve equations with unknowns on both sides.	<p>Do Now: 5-A-Day Plenary: TEQ (Typical exam question) 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	
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
	Use correct notation to show inclusive and exclusive inequalities.	5.4 Introducing inequalities	Can you Use the inequality signs between integers?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7, M1, C3, C5, C6, Sp2 Sp9

	Solve simple linear inequalities.	<p>Do Now: 5-A-Day Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc</p>	Can you Identify numbers that satisfy an inequality?	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	
	Write down whole numbers which satisfy an inequality.			TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
	Represent inequalities on a number line.	<p>Do Now: 5-A-Day Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc</p>	Where in everyday life, do we use formulae? Make q the subject of the formula:	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 +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,
	Solve two-sided inequalities.	5.5 More inequalities		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 +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,

	Substitute values into formulae and solve equations.	5.6 More formulae		TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
	Change the subject of a formula.	Do Now: 5-A-Day Plenary: TEQ (Typical exam question) <i>Show me boards, Coaching, Independent Study, Student teachers etc</i>	Rearrange formulas that are found in maths and sciences. Show how we can use changing the subject to solve larger mathematical and scientific questions.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	
	Know the difference between an expression, an equation, a formula and an identity.			TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4,So7,C5,

	Recognise and extend sequences.	5.7 Generating sequences Do Now: 5-A-Day Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc	Describe in words how the fibonacci sequence is constructed and give examples of where it can be seen in real life.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	
				TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
S & C	Pixl Maths Aiming for grade +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,
	Use the nth term to generate terms of a sequence. Find the nth term of an arithmetic sequence.	5.8 Using the nth term of a sequence Do Now: 5-A-Day Plenary: TEQ (Typical exam question) Show me boards, Coaching, Independent Study, Student teachers etc	Describe Sequences in mathematical language.	TEQ - Show understanding of worded questions and how marking schemes test working practices	Monopolise your homework Sheet 5	So2, So6, So7 , M1, C3, C5, C6 , Sp2 Sp9
				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 +	Dependant on aiming grade	Related question teacher judgement		Pixi Booklet	So4, So7, C5,