



Yr hanner tymor hwn: Sgiliau, Gwybodaeth a Dealltwriaeth i'w ddatblygu;

During this half term: Skills, Information and Understanding to be developed;

Unit 1: Calculating and Place Value

Level 4	Level 5	Level 6 [Extension]	Level 7 [Further Extension]
<ul style="list-style-type: none"> Recognise order of operations BODMAS (÷, ×, +, -). Read and write numbers of any size. Arrange decimals in ascending order. Remember and use the times tables up to 10 x 10. Add and subtract decimals up to two decimal places showing method. Multiply and divide whole numbers with multiples of 10, 100 a 1000. Round decimals to the nearest whole number. Find all the multiples and factors of numbers. Recognise prime numbers and triangle numbers. Order negative numbers. Check my answers by considering the size of the numbers. 	<ul style="list-style-type: none"> Multiply and divide whole numbers with decimals. Multiply and divide decimals with multiples of 10, 100 a 1000. Long multiplication. Long division. Rounding numbers to a given decimal place. Check my answers by estimating. Find the least common multiple and highest common factor. Use the square and square-root terms. Add and subtract with negative numbers. Check my answers by reversing the operation. 	<ul style="list-style-type: none"> Use unknown facts to calculate known facts. Multiply and divide whole numbers and decimals with multiples of 0.1, 0.01, 0.001. Use long multiplication and division to include decimals. Simple rounding with significant figures. Find prime factors. Use cube, third-root and reciprocal terms. Multiply and divide with negative numbers. 	<ul style="list-style-type: none"> Understand the importance of powers of 10 and standard form. Understand the effect of multiplying and dividing with numbers between 0 and 1. Estimate square-roots and third-roots. Use the laws of indices. Write a number as a multiple of prime factors in index form. Consider error in measurement and calculate upper and lower bounds.

Geiriau / Termau Allweddol;

Key Terms / Words;

Positive, negative, units, tens, hundreds, ten thousand, hundred thousand, million, decimal point, tenth, hundredth, thousandth, whole number, integer, more than >, less than <, re-arrange, split, bridge, close double, total, sum, difference, multiple, divisible, remainder

Deilliannau Dysgu / Learning Outcomes	Asesiad / Assessment	Meini Prawf Llwyddiant / Success Criteria	Gwaith Cartref / Homework
<p>Deilliannau Dysgu Wythnos 1 / Week 1 Learning Outcomes</p> <ul style="list-style-type: none"> Recognise place value up to 1000 [Level 3] Recognise decimal notation for example in money problems [Level 3] Read and write numbers of any size. Arrange decimals in ascending order. Multiply and divide whole numbers with multiples of 10, 100 a 1000. Multiply and divide decimals with multiples of 10, 100 a 1000. Multiply and divide whole numbers and decimals with multiples of 0.1, 0.01, 0.001. 		<ul style="list-style-type: none"> Recognising place value 	<ul style="list-style-type: none"> Homework 1 [Place value]
<p>Deilliannau Dysgu Wythnos 2 / Week 2 Learning Outcomes</p> <ul style="list-style-type: none"> Round numbers to the nearest 10, 100 and 1000 [Level 3] Round decimals to the nearest whole number. Rounding numbers to a given decimal place. Simple rounding with significant figures. Remember and use 2, 3, 4, 5 a 10 times tables [Level 3] Remember and use the times tables up to 10 x 10. Recognise order of operations BODMAS (÷, ×, +, -). 		<ul style="list-style-type: none"> Rounding rules Tables Understand order of operations 	<ul style="list-style-type: none"> Homework 2 [Rounding]
<p>Deilliannau Dysgu Wythnos 3 / Week 3 Learning Outcomes</p> <ul style="list-style-type: none"> Add and subtract numbers of at least two digits [Level 3] Solve problems with multiplying and dividing simple whole numbers [Level 3] Add and subtract decimals up to two decimal places showing method. Multiply and divide whole numbers with decimals. Long multiplication. Long division. Use long multiplication and division to include decimals. 		<ul style="list-style-type: none"> Using the 4 operators 	<ul style="list-style-type: none"> Homework 3 [4 operators]

Deilliannau Dysgu / Learning Outcomes	Asesiad / Assessment	Meini Prawf Llwyddiant / Success Criteria	Gwaith Cartref / Homework
<p>Deilliannau Dysgu Wythnos 4 / Week 4 Learning Outcomes</p> <ul style="list-style-type: none"> • Check my answers by considering the size of the numbers • Check my answers by reversing the operation • Use unknown facts to calculate known facts • Check my answers by estimating • Understand the negative number line when discussing temperature [Level 3] • Order negative numbers • Add and subtract with negative numbers • Multiply and divide with negative numbers 		<ul style="list-style-type: none"> • Inverse operations • Estimation • Calculations with negative numbers 	<ul style="list-style-type: none"> • Homework 4 [Negative numbers]
<p>Deilliannau Dysgu Wythnos 5 / Week 5 Learning Outcomes</p> <ul style="list-style-type: none"> • Recognise square numbers [Level 3] • Recognise prime numbers and triangle numbers • Use the square and square-root terms • Use cube, third-root and reciprocal terms • Find all the multiples and factors of numbers • Find the least common multiple and highest common factor • Find prime factors 		<ul style="list-style-type: none"> • Square numbers, prime, cube and roots • Multiples, factors and prime numbers 	<ul style="list-style-type: none"> • Homework 5 [Multiples and Factors]
<p>Deilliannau Dysgu Wythnos 6 / Week 6 Learning Outcomes</p> <ul style="list-style-type: none"> • ASSESSMENT TASK 1 – Revision of learning outcomes for unit 1 and receive class test. 	<ul style="list-style-type: none"> • End of Unit 1 class test. 	<ul style="list-style-type: none"> • Review the result of the class test for unit 1. • Reflect on the success criteria for unit 1 and note any progress. 	<ul style="list-style-type: none"> • Revise for unit 1 test.
<p>Fframwaith Rhifedd / Numeracy Framework</p> <p>Developing numerical reasoning – Identify processes and connections</p> <ul style="list-style-type: none"> • Select, trial and evaluate a variety of possible approaches and break complex problems into a series of tasks • Prioritise and organise the relevant steps needed to complete the task or reach a solution • Choose an appropriate mental or written strategy and know when it is appropriate to use a calculator • Use a scientific calculator to carry out calculations effectively and efficiently using the available range of function keys • Identify what further information might be required and select what information is most appropriate • Select appropriate mathematics and techniques to use <p>Developing numerical reasoning – Represent and communicate</p> <ul style="list-style-type: none"> • Explain results and procedures precisely using appropriate mathematical language • Refine methods of recording calculations <p>Developing numerical reasoning – review</p> <ul style="list-style-type: none"> • Select and apply appropriate checking strategies • Interpret answers within the context of the problem and consider whether answers, including calculator, analogue and digital displays, are sensible 	<p>Fframwaith Llythrennedd / Literacy Framework</p> <p>Responding to what has been read – Comprehension</p> <ul style="list-style-type: none"> • Read with concentration texts, on-screen and on paper, that are new to them, and understand the information in them • Select the main points from texts and identify how information and evidence are used to support them <p>Responding to what has been read – Response and analysis</p> <ul style="list-style-type: none"> • Collate and summarise relevant information, e.G. <i>Pull together and sum up facts and ideas about an issue</i>, from different texts <p>Developing and presenting information and ideas – Speaking</p> <ul style="list-style-type: none"> • Present topics and ideas clearly, using formal language and varying what they say and how they say it to interest listeners, e.G. <i>Expression, tone of voice, volume</i> • Respond to listeners' questions and comments constructively and in detail • Argue a convincing case using subject knowledge effectively, e.G. <i>In role or debate</i> <p>Developing and presenting information and ideas – Listening</p> <ul style="list-style-type: none"> • Respond thoughtfully to others' ideas, asking pertinent questions • Listen to explanations of processes, sequences or points of view and identify the main points in order 		



Yr hanner tymor hwn: Sgiliau, Gwybodaeth a Dealltwriaeth i'w ddatblygu;

During this half term: Skills, Information and Understanding to be developed;

Unit 3: Shape and Space

Level 4	Level 5	Level 6 [Extension]	Level 7 [Further Extension]
<ul style="list-style-type: none"> Plot coordinates in the first quadrant. Read scales on different kinds of measuring equipment. Choose the correct units and equipment when drawing and measuring. Classify and name triangles when considering their properties. Find the perimeter of 2D shapes. Find the area of 2D shapes by counting squares. Find the volume of 3D shapes by counting cubes. Recognise simple nets and create 3D models. Understand the meaning of face, edge and vertex in 3D shapes. Use the direction of a compass (N, E, S, W) to locate objects. Describe the size of angles using the words acute, obtuse and reflex. Recognise parallel and perpendicular lines. 	<ul style="list-style-type: none"> Plot coordinates in all four quadrants. Make sensible estimations when measuring everyday objects. Read and use scales in maps or plans. Convert metric units and recognise imperial units. Draw circles with compass and recognise the names of it's parts. Calculate the area of a rectangle and triangle using the formula. Calculating volume of a cuboid knowing the length, width and depth. Estimating, measuring and drawing angles to the nearest degree. Constructing a triangle to scale using protractor and ruler. Calculating angles on a straight line, full turn and in triangles. 	<ul style="list-style-type: none"> Classify and name quadrilaterals when considering their properties. Calculating areas of parallelograms, trapeziums and composite shapes. Draw and use 2D representations of 3D shapes. 	<ul style="list-style-type: none"> Calculate the volume of any prism including cylinder. Use Pythagoras theorem in 2D. Calculating any composite measure including speed and density.

Geiriau / Termau Allweddol;

Key Terms / Words;

Length, width, depth, height, perimeter, area, volume, time, mass, 1D, 2D, 3D, coordinates, quadrant, scale, triangle, equilateral, isosceles, scalene, quadrilaterals, square, rhombus, kite, trapezium, parallelogram, arrow front, composite, nets, face, edge, vertex, North, East, South, West, locate, acute, obtuse, reflex, parallel, perpendicular, metric, imperial. Circle, radius, diameter, circumference, arc, sector, cord, segment.

Deilliannau Dysgu / Learning Outcomes

Asesiad / Assessment

Meini Prawf Llywyddiant / Success Criteria

Gwaith Cartref / Homework

<p>Deilliannau Dysgu Wythnos 1 / Week 1 Learning Outcomes</p> <ul style="list-style-type: none"> Use appropriate units to measure length, time, mass and liquid [Level 3] Read scales on different kinds of measuring equipment. Choose the correct units and equipment when drawing and measuring. Convert metric units and recognise imperial units. Make sensible estimations when measuring everyday objects. 		<ul style="list-style-type: none"> Measure and units 	<ul style="list-style-type: none"> Homework 1 [Units]
<p>Deilliannau Dysgu Wythnos 2 / Week 2 Learning Outcomes</p> <ul style="list-style-type: none"> Plot coordinates in all four quadrants. Read and use scales in maps or plans. Use the direction of a compass (N, E, S, W) to locate objects. 		<ul style="list-style-type: none"> Location 	<ul style="list-style-type: none"> Homework 2 [Coordinates]
<p>Deilliannau Dysgu Wythnos 3 / Week 3 Learning Outcomes</p> <ul style="list-style-type: none"> Find the perimeter of 2D shapes. Find the area of 2D shapes by counting squares. Calculate the area of a rectangle and triangle using the formula. Calculating areas of parallelograms, trapeziums and composite shapes. Find the volume of 3D shapes by counting cubes. Calculating volume of a cuboid knowing the length, width and depth. 		<ul style="list-style-type: none"> Perimeter and Area of 2D shapes Volume of 3D shapes 	<ul style="list-style-type: none"> Homework 3 [Perimeter and Area]

<p>Deilliannau Dysgu Wythnos 4 / Week 4 Learning Outcomes</p> <ul style="list-style-type: none"> Name and classify 2D and 3D Shapes. [Level 3] Classify and name triangles when considering their properties. Classify and name quadrilaterals when considering their properties. Constructing a triangle to scale using protractor and ruler. Draw circles with compass and recognise the names of it's parts. Draw and use 2D representations of 3D shapes. Recognise simple nets and create 3D models. Understand the meaning of face, edge and vertex in 3D shapes. 		<ul style="list-style-type: none"> Properties of 2D and 3D shapes. Constructing Nets of 3D shapes. 	<ul style="list-style-type: none"> Homework 4 [Shapes Properties]
<p>Deilliannau Dysgu Wythnos 5 / Week 5 Learning Outcomes</p> <ul style="list-style-type: none"> Describe the size of angles using the words acute, obtuse and reflex. Estimating, measuring and drawing angles to the nearest degree. Calculating angles on a straight line, full turn and in triangles. Recognise parallel and perpendicular lines. 		<ul style="list-style-type: none"> Angles 	<ul style="list-style-type: none"> Homework 5 [Angles]
<p>Deilliannau Dysgu Wythnos 6 / Week 6 Learning Outcomes</p> <ul style="list-style-type: none"> ASSESSMENT TASK 4 – Reasoning test ASSESSMENT TASK 5 – Revision of learning outcome for unit 3 and receive class test. 	<ul style="list-style-type: none"> Reasoning test End of Unit 3 class test. 	<ul style="list-style-type: none"> Review the result of the class test for Unit 3. Reflect on the success criteria for Unit 3 and note any progress. 	<ul style="list-style-type: none"> Revise for Unit 3 test.
<p>Fframwaith Rhifedd / Numeracy Framework</p> <p>Developing numerical reasoning – Identify processes and connections</p> <ul style="list-style-type: none"> Select, trial and evaluate a variety of possible approaches and break complex problems into a series of tasks Prioritise and organise the relevant steps needed to complete the task or reach a solution Choose an appropriate mental or written strategy and know when it is appropriate to use a calculator Use a scientific calculator to carry out calculations effectively and efficiently using the available range of function keys Identify what further information might be required and select what information is most appropriate Select appropriate mathematics and techniques to use <p>Developing numerical reasoning – Represent and communicate</p> <ul style="list-style-type: none"> Explain results and procedures precisely using appropriate mathematical language Refine methods of recording calculations Use appropriate notation, symbols and units of measurement, including compound measures Select and construct diagrams with suitable scales <p>Developing numerical reasoning – Review</p> <ul style="list-style-type: none"> Select and apply appropriate checking strategies Interpret answers within the context of the problem and consider whether answers, including calculator, analogue and digital displays, are sensible 	<p>Fframwaith Llythrennedd / Literacy Framework</p> <p>Responding to what has been read – Comprehension</p> <ul style="list-style-type: none"> Read with concentration texts, on-screen and on paper, that are new to them, and understand the information in them Select the main points from texts and identify how information and evidence are used to support them <p>Responding to what has been read – Response and analysis</p> <ul style="list-style-type: none"> Collate and summarise relevant information, <i>e.g. Pull together and sum up facts and ideas about an issue</i>, from different texts <p>Developing and presenting information and ideas – Speaking</p> <ul style="list-style-type: none"> Present topics and ideas clearly, using formal language and varying what they say and how they say it to interest listeners, <i>e.g. Expression, tone of voice, volume</i> Respond to listeners' questions and comments constructively and in detail Argue a convincing case using subject knowledge effectively, <i>e.g. In role or debate</i> <p>Developing and presenting information and ideas – Listening</p> <ul style="list-style-type: none"> Respond thoughtfully to others' ideas, asking pertinent questions Listen to explanations of processes, sequences or points of view and identify the main points in order 		



Yr hanner tymor hwn: Sgiliau, Gwybodaeth a Dealltwriaeth i'w ddatblygu;

During this half term: Skills, Information and Understanding to be developed;

Unit 4 – Fractions, Decimals, Percentages and Ratio

Level 4	Level 5	Level 6 [Extension]	Level 7 [Further extension]
<ul style="list-style-type: none"> Recognise equivalent fractions, decimals and percentages Calculate simple fractions of sizes or measurements (numerator = 1) Understand the meaning of 'percentage' and calculate simple percentages (e.g. 25%, 50%) Add and subtract simple fractions with equal denominator 	<ul style="list-style-type: none"> Simplify fractions Arrange a fraction, percentage and decimal in ascending order Recognise that some fractions are equivalent to recurring decimals, e.g. 1/3 is 0.333... Convert improper fractions and mixed numbers Calculate any fraction or simple percentages of sizes or measurements Add and subtract fractions converting only one fraction Multiply a fraction with a whole number or other fraction Use ratio and proportion including scales on maps 	<ul style="list-style-type: none"> Add and subtract fractions with different denominators finding LCM Calculate one number as a percentage of another number Using a calculator to find percentage, fraction or decimal of any number where appropriate. Calculate percentage increase and decrease including simple interest or tax. Divide a fraction with a whole number or other fraction Calculate the reciprocal of a fraction or decimal Divide a quantity into two or more parts by a ratio 	<ul style="list-style-type: none"> Add, Subtract, Multiply and divide mixed numbers Calculate compound interest and depreciation using a multiplier Use reverse percentage to calculate the original price

Geiriau / Termau Allweddol;

Key Terms / Words;

Equivalent, Numerator, Denominator, Simplify, ascending, recurring, improper, mixed numbers, convert, ratio, scale, lowest common multiple, increase, decrease, interest, tax, reciprocal

Deilliannau Dysgu / Learning Outcomes

Asesiad / Assessment

Meini Prawf Llwyyddiant / Success Criteria

Gwaith Cartref / Homework

<p>Deilliannau Dysgu Wythnos 1 / Week 1 Learning Outcomes</p> <ul style="list-style-type: none"> Find the fraction or colour a shape by any fraction [Level 3] Recognise equivalent fractions. Simplify fractions Arrange a fraction in ascending order Convert improper fractions and mixed numbers Calculate the reciprocal of a fraction 		<ul style="list-style-type: none"> Handling fractions 	<ul style="list-style-type: none"> Homework 1 [Equivalent fractions]
<p>Deilliannau Dysgu Wythnos 2 / Week 2 Learning Outcomes</p> <ul style="list-style-type: none"> Calculate halves or quarters of simple amounts [Level 3] Calculate simple fractions of sizes or measurements (numerator = 1) Calculate any fraction of sizes or measurements Calculate one number as a percentage of another number 		<ul style="list-style-type: none"> Fractions of a number 	<ul style="list-style-type: none"> Homework 2 [Fraction of a number]
<p>Deilliannau Dysgu Wythnos 3 / Week 3 Learning Outcomes</p> <ul style="list-style-type: none"> Add and subtract simple fractions with equal denominator Add and subtract fractions converting only one fraction Add and subtract fractions with different denominators finding LCM Multiply a fraction with a whole number or other fraction Divide a fraction with a whole number or other fraction 		<ul style="list-style-type: none"> Add and subtract fractions. Multiply and divide fractions. 	<ul style="list-style-type: none"> Homework 3 [Add and subtract fractions]

Deilliannau Dysgu Wythnos 4 / Week 4 Learning Outcomes			
<ul style="list-style-type: none"> Understand the meaning of 'percentage' and calculate simple percentages (e.g. 25%, 50%) Calculate any simple percentages of sizes or measurements Calculate one number as a percentage of another number Calculate percentage increase and decrease including simple interest or tax. 		<ul style="list-style-type: none"> Calculating with percentages 	<ul style="list-style-type: none"> Homework 4 [Percentages]
<ul style="list-style-type: none"> Recognise equivalent fractions, decimals and percentages Recognise that some fractions are equivalent to recurring decimals, e.g. $\frac{1}{3}$ is 0.333... Arrange a fraction, percentage and decimal in ascending order Calculate the reciprocal of a decimal Using a calculator to find percentage, fraction or decimal of any number where appropriate. Use ratio and proportion including scales on maps Divide a quantity into two or more parts by a ratio 		<ul style="list-style-type: none"> Fractions, decimals and percentages Ratio 	<ul style="list-style-type: none"> Homework 5 [equivalent fractions, decimals and percentages]
<p>Deilliannau Dysgu Wythnos 6 / Week 6 Learning Outcomes</p> <ul style="list-style-type: none"> ASSESSMENT TASK 6 – Revision of learning outcomes for unit 4 and receive class test ASSESSMENT TASK 7 – Revision of learning outcomes for unit 3 and 4 and receive mental arithmetic test 	<ul style="list-style-type: none"> End of Unit 4 class test Mental arithmetic test 2 	<ul style="list-style-type: none"> Review the result of the class test for unit 4. Reflect on the success criteria for unit 4 and note any progress. 	<ul style="list-style-type: none"> Revise for unit 4 test. Revise for mental arithmetic test 2 (unit 3 + 4).
<p>Fframwaith Rhifedd / Numeracy Framework</p> <p>Developing numerical reasoning – Identify processes and connections</p> <ul style="list-style-type: none"> Select, trial and evaluate a variety of possible approaches and break complex problems into a series of tasks Prioritise and organise the relevant steps needed to complete the task or reach a solution Choose an appropriate mental or written strategy and know when it is appropriate to use a calculator Use a scientific calculator to carry out calculations effectively and efficiently using the available range of function keys Identify what further information might be required and select what information is most appropriate Select appropriate mathematics and techniques to use <p>Developing numerical reasoning – Represent and communicate</p> <ul style="list-style-type: none"> Explain results and procedures precisely using appropriate mathematical language Refine methods of recording calculations Select and construct diagrams with suitable scales <p>Developing numerical reasoning – Review</p> <ul style="list-style-type: none"> Select and apply appropriate checking strategies Interpret answers within the context of the problem and consider whether answers, including calculator, analogue and digital displays, are sensible 	<p>Fframwaith Llythrennedd / Literacy Framework</p> <p>Responding to what has been read – Comprehension</p> <ul style="list-style-type: none"> Read with concentration texts, on-screen and on paper, that are new to them, and understand the information in them Select the main points from texts and identify how information and evidence are used to support them <p>Responding to what has been read – Response and analysis</p> <ul style="list-style-type: none"> Collate and summarise relevant information, e.g. <i>Pull together and sum up facts and ideas about an issue</i>, from different texts <p>Developing and presenting information and ideas – Speaking</p> <ul style="list-style-type: none"> Present topics and ideas clearly, using formal language and varying what they say and how they say it to interest listeners, e.g. <i>Expression, tone of voice, volume</i> Respond to listeners' questions and comments constructively and in detail Argue a convincing case using subject knowledge effectively, e.g. <i>In role or debate</i> <p>Developing and presenting information and ideas – Listening</p> <ul style="list-style-type: none"> Respond thoughtfully to others' ideas, asking pertinent questions Listen to explanations of processes, sequences or points of view and identify the main points in order 		