

Term - Dates	No. Week (s) to complete	No. of lessons	Unit Title Essential skills	Standard and Sub-Standard	Learning Objective	Resources for the Unit	E-Learning	Comments
TERM 1								
WHOLE NUMBERS 1 – UNIT 1								
T1. 8/9 - 19/9	2	8	Unit 1: Whole Numbers 1 Develop understanding of numbers to 1000. Build on knowledge of place value, focusing particularly on three-digit numbers. Practise counting, reading and writing three-digit numbers and move on to identify their constituent parts.	Number - Numbers and the Number System Problem Solving	3Nn1 Recite numbers 100 to 200 and beyond. 3Nn2 Read and write numbers to at least 1000. 3Nn3 Count on and back in ones, tens and hundreds from two- and three-digit numbers. 3Nn4 Count on and back in steps of 2, 3, 4 and 5 to at least 50. 3Nn5 Understand what each digit represents in three-digit numbers and partition into hundreds, tens and units. 3Nn6 Find 1, 10, 100 more/less than two- and three-digit numbers. 3Nn9 Place a three-digit number on a number line marked off in multiples of 100. 3Nn10 Place a three-digit number on a number line marked off in multiples of 10. 3Ps3 Explore and solve number problems and puzzles, e.g. logic problems. 3Ps5 Describe and continue patterns which count on or back in steps of 2, 3, 4, 5, 10, or 100. 3Ps6 Identify simple relationships between numbers, e.g. each number is three more than the number before it.	100 Square Number cards 0–1000 Countable objects 2, 5, 10 cards Interlocking cubes 1–6 spinner Number lines		Learners sometimes write HTU numbers 'literally', for example, writing one hundred and forty-two as 100402. In the decimal number system, zero is used as a placeholder. It is important that learners are exposed to this idea and encouraged to use the vocabulary of 'zero showing an empty column or place'.
WHOLE NUMBERS 1 UNIT 1 ASSESSMENT – 19TH SEPTEMBER 2019								
ADDITION AND SUBTRACTION 1 – UNIT 5								
T1. 22/9 – 3/10	2	8	Unit 5: Addition and Subtraction 1 Add and subtract multiples of 10 and 100 and identify the resulting changes to numbers. Investigate how to alter calculations to make them easier, for example, by re-ordering an addition.	Calculation – Mental Strategies Addition/ Subtraction Problem Solving	3Nc1 Know addition and subtraction facts for all numbers to 20. 3Nc2 Know the following addition and subtraction facts: – multiples of 100 with a total of 1000 – multiples of 5 with a total of 100. 3Nc9 Add and subtract 10 and multiples of 10 to and from two- and three-digit numbers. 3Nc10 Add 100 and multiples of 100 to three-digit numbers. 3Nc11 Use the = sign to represent equality, e.g. $75 + 25 = 95 + 5$. 3Nc12 Add several small numbers. 3Nc16 Re-order an addition to help with the calculation, e.g. $41 + 54$, by adding 40 to 54, then 1. 3Pt1 Choose appropriate mental strategies to carry out calculations. 3Pt3 Make sense of and solve word problems, single (all four operations) and two-step (addition and subtraction), and begin to represent them, e.g. with drawings or on a number line. 3Pt4 Check the results of adding two numbers using subtraction, and several numbers by adding in a different order. 3Pt5 Check subtraction by adding the answer to the smaller number in the original calculation.	0 - 100 number cards Counters Interlocking cubes Base 10		Help learners to break longer additions down, so they add two numbers at a time. Use the word sum strictly in the context of addition and explain when learners use it incorrectly. Spend time reinforcing the meaning of = as is the same as and not the answer to a question.

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					<p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, including in the context of money.</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p> <p>3Ps3 Explore and solve number problems and puzzles, e.g. logic problems.</p>			

ADDITION AND SUBTRACTION 1 UNIT 5 ASSESSMENT – 3RD OCTOBER

MULTIPLICATION AND DIVISION 1 – UNIT 8

T1. 6/10 – 17/10	2	8	<p>Unit 8: Multiplication and Division 1</p> <p>Revise multiplication and division facts for the two, three, five and ten times tables and consolidate understanding of the facts for the four times tables.</p> <p>Learn that doubling a number twice is the same as multiplying it by 4.</p> <p>Identify multiples of 2, 5 and 10 and their characteristics.</p> <p>Explore relationships e.g. halving is the inverse of doubling – half of a number doubled is the same as the original number that was halved.</p>	<p>Calculation – Mental Strategies</p> <p>Multiplication/ Division</p> <p>Problem Solving</p>	<p>3Nc3 Know multiplication/division facts for 2×, 3×, 5×, and 10× tables.</p> <p>3Nc4 Begin to know 4× table.</p> <p>3Nc5 Recognise two- and three-digit multiples of 2, 5 and 10.</p> <p>3Nc19 Understand the relationship between halving and doubling.</p> <p>3Nc20 Understand the effect of multiplying two-digit numbers by 10.</p> <p>3Nc25 Understand and apply the idea that multiplication is commutative.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt3 Make sense of and solve word problems, single (all four operations) [and two-step (addition and subtraction)], and begin to represent them, e.g. with drawings or on a number line.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, including in the context of money.</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p> <p>3Ps3 Explore and solve number problems and puzzles, e.g. logic problems.</p>	<p>0 - 100 number cards</p> <p>Counters</p> <p>Interlocking cubes</p> <p>Marbles</p>		<p>Learners need to memorise multiplication and division facts well enough to recall them instantly.</p> <p>Learners often find it difficult to identify the operation needed to solve word problems, start by giving word problems without asking learners to solve them. Simply ask them to identify whether each question can be solved by +, −, ÷ or × (or a combination).</p>
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MULTIPLICATION AND DIVISION 1 UNIT 8 ASSESSMENT – 10TH OCTOBER

2D SHAPE – UNIT 11

T1 20/10 – 24/10	1	4	<p>Unit 11: 2D Shapes</p> <p>To focus on regular and irregular 2D shapes.</p> <p>Explore the properties of shapes such as pentagons and hexagons.</p> <p>Identify 2D shapes in pictures and patterns.</p>	<p>Geometry – Shapes and Geometric Reasoning</p> <p>Problem Solving</p>	<p>3Gs1 Identify, describe and draw regular and irregular 2D shapes including pentagons, hexagons, octagons and semi-circles.</p> <p>3Gs2 Classify 2D shapes according to the number of sides, vertices and right angles.</p> <p>3Gs5 Draw and complete 2D shapes with reflective symmetry and draw reflections of shapes (mirror line along one side).</p> <p>3Gs6 Relate 2D shapes [and 3D solids] to drawings of them.</p> <p>3Gs7 Identify 2D [and 3D] shapes, lines of symmetry and right angles in the environment.</p> <p>3Gs8 Identify right angles in 2D shapes.</p>	<p>2D shapes to include regular and irregular: rectangles, squares, hexagons etc</p> <p>Coloured pencils</p>		<p>The name of a shape is given according to the number of sides and vertices it has. It is important to emphasise that a pentagon is any shape with five sides and vertices.</p> <p>When looking at regular shapes, learners may only recognise them in one orientation, so it is</p>
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Term - Dates	No. Week (s) to complete	No. of lessons	Unit Title Essential skills	Standard and Sub-Standard	Learning Objective	Resources for the Unit	E-Learning	Comments
					<p>3Pt8 Recognise the relationships between different 2D shapes.</p> <p>3Ps7 Identify simple relationships between shapes, e.g. these shapes all have the same number of lines of symmetry.</p> <p>3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.</p>			important that they see the same shape in different positions e.g. diamond is still a square
2D SHAPE UNIT 11 ASSESSMENT – 17TH OCTOBER								
3D SHAPE - UNIT 12								
T1 27/10 – 31/10	1	4	<p>Unit 12: 3D Shapes</p> <p>To understand that 3D shapes can initially be classified into those that have curved surfaces, such as spheres, and those that have flat surfaces, such as cubes.</p> <p>Begin to know the correct terminology and classify the shapes.</p>	<p>Geometry – Shapes and Geometric Reasoning</p> <p>Problem Solving</p>	<p>3Gs3 Identify, describe and make 3D shapes including pyramids and prisms; investigate which nets will make a cube.</p> <p>3Gs4 Classify 3D shapes according to the number and shape of faces, number of vertices and edges.</p> <p>3Gs6 Relate [2D shapes and] 3D solids to drawings of them.</p> <p>3Gs7 Identify [2D and] 3D shapes, [lines of symmetry and right angles] in the environment.</p> <p>3Pt9 Identify the differences and similarities between different 3D shapes.</p> <p>3Ps7 Identify simple relationships between shapes, [e.g. these shapes all have the same number of lines of symmetry.]</p> <p>3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it, [e.g. when adding 10 to a number, the first digit remains the same.]</p> <p>3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.</p>	3D shapes: sphere, cone, cylinder, cube, cuboid, pyramid: square-based and triangular-based if available (per pair)		<p>Some learners may confuse names of 2D shapes with names of 3D shapes and name the 3D shape by the shape of its face.</p> <p>Give learners opportunities to examine and unfold packages such as tubes and prism-shaped confectionary packets. This will help them when they carry out work related to nets.</p>
3D SHAPE UNIT 12 ASSESSMENT – 31ST OCTOBER								
LENGTH – UNIT 15								
T1 3/11 – 7/11	1	4	<p>Unit 15: Length</p> <p>Begin to explore the appropriate equipment and units to use when estimating, and then measuring and recording, different lengths. This will include when to use a ruler, metre stick and trundle wheel and also whether to use centimetres, metres or kilometres.</p>	<p>Measure – Length, mass and capacity</p> <p>Problem Solving</p>	<p>3MI1 Choose and use appropriate units and equipment to estimate, measure and record measurements.</p> <p>3MI2 Know the relationship between kilometres and metres, metres and centimetres, [kilograms and grams, litres and millilitres.]</p> <p>3MI4 Use a ruler to draw and measure lines to the nearest centimetre.</p> <p>3MI5 Solve word problems involving measures.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt2 Begin to understand everyday systems of measurement in length, [weight, capacity and time] and use these to make measurements as appropriate.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p>			<p>Learners may forget equivalences between units, for example, how many metres make one Kilometre</p> <p>For accurate measurement, they must place the start of the item being measured beside the zero.</p> <p>Some learners still may have problems with</p>

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			<p>Focus on developing an understanding of the relationship between the units of centimetres, metres and kilometres.</p> <p>Solving word problems with length in real-life contexts.</p>		<p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, [including in the context of money.]</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p>			conservation of length. If you give them, for example, a straight length of string to measure and then give them that same piece of string in a ball, they may measure it twice, thinking that the appearance of the ball means the length has changed. Learners need to understand that the string will be the same length, no matter how it looks.

LENGTH UNIT 15 ASSESSMENT – 7TH NOVEMBER

MASS – UNIT 16

T1 10/11 - 14/11	1	4	<p>Unit 16: Mass</p> <p>Begin to explore the appropriate equipment and units to use when estimating and then measuring and recording different masses. This includes whether to use grams, or kilograms.</p> <p>Use various strategies to find equivalences between them.</p> <p>Weigh real items in order to learn how to read intervals on a scale.</p> <p>Solve word problems involving mass in real-life contexts.</p>	<p>Measure – Length, mass and capacity</p> <p>Problem Solving</p>	<p>3MI1 Choose and use appropriate units and equipment to estimate, measure and record measurements.</p> <p>3MI2 Know the relationship between [kilometres and metres, metres and centimetres], kilograms and grams, [litres and millilitres.]</p> <p>3MI3 Read to the nearest division or half division, use scales that are numbered or partially numbered.</p> <p>3MI5 Solve word problems involving measures.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt2 Begin to understand everyday systems of measurement in [length], weight, [capacity and time] and use these to make measurements as appropriate.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p> <p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, [including in the context of money.]</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p>			<p>As with length, some learners may forget equivalences between units, for example, how many grams make one kilogram.</p> <p>Learners often think weight is how heavy something is. Mass is a measurement of how much matter is in an object, weight is a measurement of how hard gravity is pulling on that object. You could explain using the example of a person in space.</p> <p>Learners need to understand that the same piece of material will be the same mass, no matter how it looks.</p>
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MASS UNIT 16 ASSESSMENT – 14TH NOVEMBER

TERM 2

WHOLE NUMBERS 2 – UNIT 2

Term - Dates	No. Week (s) to complete	No. of lessons	Unit Title Essential skills	Standard and Sub-Standard	Learning Objective	Resources for the Unit	E-Learning	Comments
T2 5/1/20 – 16/1/20	2	8	Unit 2: Whole Numbers 2 Develop understanding of numbers to 1000. Build on knowledge of place value. Understand the value of three separate digits, compare and order numbers. Round numbers and estimate amounts.	Number - Numbers and the Number System Problem Solving	3Nn3 Count on and back in ones, tens and hundreds from two- and three-digit numbers. 3Nn4 Count on and back in steps of 2, 3, 4 and 5 to at least 50. 3Nn5 Understand what each digit represents in three-digit numbers and partition into hundreds, tens and units. 3Nn6 Find 1, 10, 100 more/less than two- and three-digit numbers. 3Nn7 Multiply two-digit numbers by 10 and understand the effect. 3Nn8 Round two-digit numbers to the nearest 10 and round three-digit numbers to the nearest 100. 3Nn9 Place a three-digit number on a number line marked off in multiples of 100. 3Nn10 Place a three-digit number on a number line marked off in multiples of 10. 3Nn11 Compare three-digit numbers, use < and > signs, and find a number in between. 3Nn12 Order two- and three-digit numbers. 3Nn13 Give a sensible estimate of a number as a range (e.g. 30 to 50) by grouping in tens. 3Ps3 Explore and solve number problems and puzzles, e.g. logic problems. 3Ps5 Describe and continue patterns which count on or back in steps of 2, 3, 4, 5, 10, or 100. 3Ps6 Identify simple relationships between numbers, e.g. each number is three more than the number before it. 3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it [e.g. when adding 10 to a number, the first digit remains the same]. 3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.	100 Square Number cards 0–1000 Countable objects. Interlocking cubes 1–6 spinner Base 10 equipment Place value arrow cards		When expressing a three-digit number, some learners will just name the digit, for example, the value of the middle digit in 523 is 2. Learners may find the meaning of the > and < symbols difficult to remember. Estimation can be problematic as learners like to guess correctly

WHOLE NUMBERS 2 UNIT 2 ASSESSMENT – 16th JANUARY

ADDITION AND SUBTRACTION 2 – UNIT 6

T2 19/1/20 – 30/1/20	2	8	Unit 6: Addition and Subtraction 2 Explore patterns and processes when adding and subtracting numbers. Continue to use the = sign when reading and writing calculations. Present all calculations horizontally, and identify as many patterns between numbers as possible. Continue to partition numbers in order to simplify questions.	Calculation – Mental Strategies Addition/ Subtraction Problem Solving	3Nc2 Know the following addition and subtraction facts: – multiples of 100 with a total of 1000 – multiples of 5 with a total of 100. 3Nc14 Add and subtract pairs of two-digit numbers. 3Nc15 Add three-digit and two-digit numbers using notes to support. 3Nc17 Add/subtract single-digit numbers to/from three-digit numbers. 3Nc18 Find 20, 30, ... 90, 100, 200, 300 more/less than three-digit numbers. 3Pt1 Choose appropriate mental strategies to carry out calculations. 3Pt3 Make sense of and solve word problems, single (all four operations) and two-step (addition and subtraction), and begin to represent them, e.g. with drawings or on a number line. 3Pt4 Check the results of adding two numbers using subtraction, and several numbers by adding in a different order. 3Pt10 Estimate and approximate when calculating, and check working.	0 - 100 number cards Counters Interlocking cubes Place value arrow cards		Remind learners that the word sum should only be used in the context of addition. Visualise the effect of a calculation crossing a tens or hundreds boundary by moving forwards and backwards along number lines. Some learners may overly-rely on pencil and paper methods; encourage them to match the method to the calculation.
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					<p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Ps1 Make up a number story to go with a calculation, including in the context of money.</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p> <p>3Ps3 Explore and solve number problems and puzzles, e.g. logic problems.</p> <p>3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it, e.g. when adding 10 to a number, the first digit remains the same.</p> <p>3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.</p>			
ADDITION AND SUBTRACTION 2 UNIT ASSESSMENT – 30TH JANUARY								
MULTIPLICATION AND DIVISION 2 – UNIT 9								
T2 2/2/20 – 13/2/20	2	8	<p>Unit 9: Multiplication and Division</p> <p>Revise multiplication and division facts for the 2×, 3×, 4×, 5× and 10× tables and introduce to facts for the 6× and 9× tables.</p> <p>Revise working out the doubles of numbers from 1 to 20 and deriving their related halves.</p> <p>Learn to double multiples of 5 to 100, partitioning each number if necessary, doubling the tens and the units and then adding to find the total.</p> <p>Revisit the relationship between multiplication and division, understanding that one is the inverse of the other.</p>	<p>Number – Calculation: Mental strategies</p> <p>Multiplication and division</p> <p>Problem Solving</p>	<p>3Nc3 Know multiplication/division facts for 2×, 3×, 5×, and 10× tables.</p> <p>3Nc4 Begin to know 4× table.</p> <p>3Nc6 Work out quickly the doubles of numbers 1 to 20 and derive the related halves.</p> <p>3Nc7 Work out quickly the doubles of multiples of 5 (< 100) and derive the related halves.</p> <p>3Nc19 Understand the relationship between halving and doubling.</p> <p>3Nc21 Multiply single-digit numbers and divide two-digit numbers by 2, 3, 4, 5, 6, 9 and 10.</p> <p>3Nc24 Understand that division can leave a remainder (initially as ‘some left over’).</p> <p>3Nc26 Understand the relationship between multiplication and division and write connected facts.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt3 Make sense of and solve word problems, single (all four operations) [and two-step (addition and subtraction)], and begin to represent them, e.g. with drawings or on a number line.</p> <p>3Pt6 Check multiplication by reversing the order, e.g. checking that 6 × 4 = 24 by doing 4 × 6.</p> <p>3Pt7 Check a division using multiplication, e.g. check 12 ÷ 4 = 3 by doing 4 × 3.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p> <p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, including in the context of money.</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p> <p>3Ps3 Explore and solve number problems and puzzles, e.g. logic problems.</p>			<p>Give learners plenty of practice to learn the majority of the multiplication and division facts.</p> <p>Give time for learners who find memorising difficult to visual representations of multiplications as arrays and groups of objects.</p> <p>Encourage pattern-spotting, using 100 squares and the multiples themselves.</p>

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					<p>3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it [, e.g. when adding 10 to a number, the first digit remains the same].</p> <p>3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.</p>			

MULTIPLICATION AND DIVISION 2 UNIT 9 ASSESSMENT – 13TH FEBRUARY

MONEY – UNIT 14

T2 16/2/20 – 20/2/20	1	4	<p>Unit 14: Money</p> <p>Learners will explore the notation of money in terms of dollars and cents.</p> <p>This notation links well to the introduction of decimals, for example, one dollar 25 cents can be written as \$1.25.</p> <p>Find totals and change.</p> <p>Opportunities to handle real money.</p> <p>Link to real-life situations and problem solving</p>	<p>Measure – Money</p> <p>Problem Solving</p>	<p>3Mm1 Consolidate using money notation.</p> <p>3Mm2 Use addition and subtraction facts with a total of 100 to find change.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt3 Make sense of and solve word problems, single (all four operations) and two-step (addition and subtraction), and begin to represent them, e.g. with drawings or on a number line.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p> <p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, including in the context of money.</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p>			<p>Learners often confuse coins and their values. Some may think the smallest coin must have the least value and the largest the greatest value, instead of examining each coin to find its worth in cents.</p> <p>Another area that might confuse is the written decimal format for dollars and cents. If a decimal ends with a zero, it is common to delete that zero. In money it needs to stay, so that the actual number of cents are shown.</p>
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MONEY UNIT 14 ASSESSMENT – 20TH FEBRUARY

CAPACITY – UNIT 17

T2 23/2/20 – 27/2/20	1	4	<p>Unit 17: Capacity</p> <p>Begin to explore the appropriate equipment and units to use when estimating and then measuring and recording different capacities and volumes. This should include whether to use millilitres or litres.</p> <p>Measure capacities and volumes in practical experiments to learn how to read intervals on a scale.</p> <p>Solve word problems involving capacity and volume in real-life contexts.</p>	<p>Measure – Length, mass and capacity</p> <p>Problem Solving</p>	<p>3MI1 Choose and use appropriate units and equipment to estimate, measure and record measurements.</p> <p>3MI2 Know the relationship between [kilometres and metres, metres and centimetres, kilograms and grams,] litres and millilitres.</p> <p>3MI3 Read to the nearest division or half division, use scales that are numbered or partially numbered.</p> <p>3MI5 Solve word problems involving measures.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt2 Begin to understand everyday systems of measurement in [length, weight,] capacity [and time] and use these to make measurements as appropriate.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p> <p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p>			<p>As with length and mass, some learners may forget equivalences between units, for example, how many millilitres are equivalent to one litre.</p> <p>Give learners the opportunity to look at bottles filled to different levels and inform them that the amount the bottle will hold is the capacity.</p> <p>Some learners may have difficulty estimating capacity and volume. It is important to give them something to compare with the capacity or volume they are estimating.</p>
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					3Ps1 Make up a number story to go with a calculation, [including in the context of money.] 3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.			

CAPACITY UNIT 17 ASSESSMENT – 27TH FEBRUARY

HANDLING DATA – UNIT 19

T2 1/3/20 – 12/3/20	2	8	Unit 19: Handling Data Revise that data can be presented in a variety of ways from, for example, simple lists; drawings and tables; charts; pictograms; block and bar graphs; pie charts and line graphs. Learn new methods for example, bar charts and pictograms with symbols representing two units. Solve problems that involve: <ul style="list-style-type: none"> collecting and selecting relevant data representing the information analysing and drawing conclusions solving the problem 	Handling data – Organising, categorising and representing data Problem Solving	3Dh1 Answer a real-life question by collecting, organising and interpreting data, e.g. investigating the population of mini-beasts in different environments. 3Dh2 Use tally charts, frequency tables, pictograms (symbol representing one or two units) and bar charts (intervals labelled in ones or twos). 3Dh3 Use Venn or Carroll diagrams to sort data and objects using two criteria. 3Pt1 Choose appropriate mental strategies to carry out calculations. 3Pt12 Consider whether an answer is reasonable. 3Ps4 Use ordered lists and tables to help to solve problems systematically. 3Ps6 Identify simple relationships between numbers, e.g. each number is three more than the number before it. 3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.			Some learners may find it difficult to read axes on graphs that ascend in intervals greater than one. When drawing conclusions from graphs, some learners may make very simple statements, for example, Three learners like cakes. They need to be encouraged to think more deeply and draw more complex conclusions, for example, Five more learners like biscuits than cakes, so Jim should buy biscuits for the party.
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HANDLING DATA UNIT 19 ASSESSMENT – 12TH MARCH

TERM 3

WHOLE NUMBERS 3 – UNIT 3

T3 12/4/20 – 16/4/20	1	4	Unit 3: Whole Numbers 3 Reinforces understanding of numbers to 1000. Explore the links between estimation and rounding. Explore the idea that numbers can be made simpler to deal with by both estimating and rounding them to the nearest 10 or 100.	Number - Numbers and the Number System Problem Solving	3Nn7 Multiply two-digit numbers by 10 and understand the effect. 3Nn8 Round two-digit numbers to the nearest 10 and round three-digit numbers to the nearest 100. 3Nn11 Compare three-digit numbers, use < and > signs, and find a number in between. 3Nn12 Order two- and three-digit numbers. 3Nn13 Give a sensible estimate of a number as a range (e.g. 30 to 50) by grouping in tens. 3Ps3 Explore and solve number problems and puzzles, e.g. logic problems. 3Ps6 Identify simple relationships between numbers [, e.g. each number is three more than the number before it].			Adding a zero on the end of a two-digit number is the obvious way to multiply by 10 and it is understandable that learners will automatically spot this pattern. However, it is important never to use this as a description as it will be misleading when learners are multiplying decimal numbers by 10 in later stages Revisit the > and < symbols which are often confused.
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Term - Dates	No. Week (s) to complete	No. of lessons	Unit Title Essential skills	Standard and Sub-Standard	Learning Objective	Resources for the Unit	E-Learning	Comments
			Continue to practise multiplication of two-digit numbers by 10. Revisit comparing and ordering numbers.		3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it [, e.g. when adding 10 to a number, the first digit remains the same]. 3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem			Reinforce the concept of estimation by way of estimating given points on a number line.

WHOLE NUMBERS 3 UNIT 3 ASSESSMENT – 16TH APRIL

FRACTIONS - UNIT 4

T3 19/4/20 – 30/4/20	2	8	Unit 4: Fractions Build on existing knowledge of simple fractions. Find halves of larger numbers (from 10 to 40) and explore halves of odd numbers. Begin to demonstrate links between the numerator and denominator when finding halves of fractions. Introduce mixed fractions, also called mixed numbers. Begin to relate finding fractions to division, identifying division calculations that can be used to find a particular fraction.	Number – Numbers and the number system Problem Solving	3Nn14 Find half of odd and even numbers to 40, using notation such as $\frac{1}{3}$, $\frac{1}{2}$. 3Nn15 Understand and use fraction notation recognising that fractions are several parts of one whole, e.g. $\frac{3}{4}$ is three-quarters and $\frac{2}{3}$ is two-thirds. 3Nn16 Recognise equivalence between $\frac{1}{2}$, $\frac{2}{4}$, $\frac{4}{8}$ and $\frac{5}{10}$ using diagrams. 3Nn17 Recognise simple mixed fractions, e.g. $1\frac{1}{2}$ and $2\frac{1}{4}$ 3Nn18 Order simple or mixed fractions on a number line, e.g. using the knowledge that $\frac{1}{2}$ comes half way between $\frac{1}{4}$ and $\frac{3}{4}$, and that $1\frac{1}{2}$ comes half way between 1 and 2. 3Nn19 Begin to relate finding fractions to division. 3Nn20 Find halves, thirds, quarters and tenths of shapes and numbers (whole number answers). 3Pt1 Choose appropriate mental strategies to carry out calculations. 3Pt12 Consider whether an answer is reasonable. 3Ps1 Make up a number story to go with a calculation, including in the context of money. 3Ps2 Explain a choice of calculation strategy and show how the answer was worked out. 3Ps3 Explore and solve number problems and puzzles, e.g. logic problems. 3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it, e.g. when adding 10 to a number, the first digit remains the same]. 3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.			Learners may have difficulty understanding of the roles of numerator and denominator. They are simply to understand the roles of the ‘top’ and ‘bottom’ numbers in a fraction. Encourage them to use the term quarters. To help them remember the term, remind learners of terms such as quadrilateral, quad bike and quadruplets where ‘quad-’ signifies four
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FRACTIONS UNIT 4 ASSESSMENT – 30TH

ADDITION AND SUBTRACTION 3 – UNIT 7

T3 3/5/20 – 14/6/20	2	8	Unit 7: Addition and Subtraction 3 Explore pairs of multiples of 5 and 100 that total 100 and 1000 respectively. Solve calculations including: TU + TU, HTU + TU, HTU + U, HTU + T and HTU + H.	Calculation – Mental Strategies Addition/ Subtraction	3Nc2 Know the following addition and subtraction facts: – multiples of 100 with a total of 1000 – multiples of 5 with a total of 100. 3Nc13 Find complements to 100, solving number equations such as $78 + ? = 100$. 3Nc14 Add and subtract pairs of two-digit numbers. 3Nc15 Add three-digit and two-digit numbers using notes to support. 3Nc17 Add/subtract single-digit numbers to/from three-digit numbers.	0 - 100 number cards Counters Interlocking cubes		Learners will not have had as much practice in counting in threes and fours as they have in counting in twos, fives and tens. These skills could be challenging for them. Give learners plenty
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Term - Dates	No. Week (s) to complete	No. of lessons	Unit Title Essential skills	Standard and Sub-Standard	Learning Objective	Resources for the Unit	E-Learning	Comments
			Find complements to 100. In particular how to solve number equations with unknown numbers in different places. Continue to use mental strategies such as partitioning.	Problem Solving	<p>3Nc18 Find 20, 30, ... 90, 100, 200, 300 more/less than three-digit numbers.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt3 Make sense of and solve word problems, single (all four operations) and two-step (addition and subtraction), and begin to represent them, e.g. with drawings or on a number line.</p> <p>3Pt4 Check the results of adding two numbers using subtraction, and several numbers by adding in a different order.</p> <p>3Pt5 Check subtraction by adding the answer to the smaller number in the original calculation.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p> <p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, including in the context of money.</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p> <p>3Ps3 Explore and solve number problems and puzzles, e.g. logic problems.</p> <p>3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it, e.g. when adding 10 to a number, the first digit remains the same.</p> <p>3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.</p>	Place value arrow cards		<p>of opportunities to choose the correct operation needed to solve unknowns:</p> <p>14 + ? = 20 (subtraction) 20 - ? = 12 (subtraction) 14 + 6 = ? (addition) 20 - 8 = ? (subtraction)</p> <p>Encourage learners not to rely overly on pencil-and paper methods. Teach them to choose methods to match the calculation in hand. Knowing when to use pencil-and-paper methods and when to work out an answer mentally is a skill that learners need practice in developing.</p>

ADDITION AND SUBTRACTION 3 UNIT 7 ASSESSMENT – 14th MAY

MULTIPLICATION AND DIVISION UNIT 10

T3 17/5/20 – 29/5/20	2	8	<p>Unit 10: Multiplication and Division</p> <p>Revise multiplication and division facts for the 2×, 3×, 4×, 5× and 10× tables. As well as memorising the facts, to multiply single-digit numbers by 2, 3, 4, 5, 6, 9 and 10.</p> <p>Begin to multiply teens numbers by both 3 and 5, by partitioning the number into tens and units and adding the totals.</p> <p>Move beyond 10 × 10 when dividing two-digit numbers by 2, 3, 4, 5, 6, 9 and 10,</p>	<p>Number – Calculation: Mental strategies,</p> <p>Multiplication and division</p> <p>Problem Solving</p>	<p>3Nc3 Know multiplication/division facts for 2×, 3×, 5×, and 10× tables.</p> <p>3Nc4 Begin to know 4× table.</p> <p>3Nc6 Work out quickly the doubles of numbers 1 to 20 and derive the related halves.</p> <p>3Nc7 Work out quickly the doubles of multiples of 5 (< 100) and derive the related halves.</p> <p>3Nc8 Work out quickly the doubles of multiples of 50 to 500.</p> <p>3Nc21 Multiply single-digit numbers and divide two-digit numbers by 2, 3, 4, 5, 6, 9 and 10.</p> <p>3Nc22 Multiply teens numbers by 3 and 5.</p> <p>3Nc23 Begin to divide two-digit numbers just beyond 10× tables, e.g. 60 ÷ 5, 33 ÷ 3.</p> <p>3Nc24 Understand that division can leave a remainder (initially as ‘some left over’).</p> <p>3Nc26 Understand the relationship between multiplication and division and write connected facts.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p>			<p>Some learners may find the progression beyond the set of 10 × 10 multiplication and division facts difficult.</p> <p>Encourage learners to use known facts to help. For example, 16 × 4 is simply 10 × 4 plus 6 × 4.</p> <p>Model such calculations, using Base 10 equipment to help partition teens number.</p>
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Term - Dates	No. Week (s) to complete	No. of lessons	Unit Title Essential skills	Standard and Sub-Standard	Learning Objective	Resources for the Unit	E-Learning	Comments
			Revisit doubling numbers to 20 and multiples of 5 to 100 (and also halving the answers).		<p>3Pt3 Make sense of and solve word problems, single (all four operations) [and two-step (addition and subtraction)], and begin to represent them, e.g. with drawings or on a number line.</p> <p>3Pt6 Check multiplication by reversing the order, e.g. checking that $6 \times 4 = 24$ by doing 4×6.</p> <p>3Pt7 Check a division using multiplication, e.g. check $12 \div 4 = 3$ by doing 4×3.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p> <p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, including in the context of money.</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p> <p>3Ps3 Explore and solve number problems and puzzles, e.g. logic problems.</p> <p>3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it [, e.g. when adding 10 to a number, the first digit remains the same].</p> <p>3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem.</p>			

MULTIPLICATION AND DIVISION UNIT 10 ASSESSMENT – 29th MAY

POSITION AND MOVEMENT- UNIT 14

T3 31/5/20 – 11/6/20	2	8	<p>Unit 14: Position and Movement</p> <p>Explore the movements of clockwise and anticlockwise and right and left turns, and physically link these turns to angles.</p>	<p>Geometry – Position and movement</p> <p>Problem Solving</p>	<p>3Gp1 Use the language of position, direction and movement, including clockwise and anti-clockwise.</p> <p>3Gp2 Find and describe the position of a square on a grid of squares where the rows and columns are labelled.</p> <p>3Gp3 Use a set square to draw right angles.</p> <p>3Gp4 Compare angles with a right angle and recognise that a straight line is equivalent to two right angles.</p> <p>3Ps7 Identify simple relationships [between shapes, e.g. these shapes all have the same number of lines of symmetry.]</p> <p>3Ps8 Investigate a simple general statement by finding examples which do or do not satisfy it, [e.g. when adding 10 to a number, the first digit remains the same.]</p> <p>3Ps9 Explain methods and reasoning orally, including initial thoughts about possible answers to a problem</p>			<p>Learners may confuse clockwise and anticlockwise.</p> <p>Some learners may continually forget in which order to read and plot co-ordinates. You could ask the learners to move their right hands to the right and their left hand upwards. This action may help them to remember horizontal axis first and then vertical.</p>
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POSITION AND MOVEMENT UNIT 14 ASSESSMENT – 4TH JUNE

TIME 2 – UNIT 18

Term - Dates	No. Week (s) to complete	No. of lessons	Unit Title Essential skills	Standard and Sub-Standard	Learning Objective	Resources for the Unit	E-Learning	Comments
T3 14/6 - 18/6	1	4	<p>Unit 18: Time</p> <p>To learn to tell the time to five minutes on an analogue clock and to the nearest minute on a digital clock.</p> <p>Use the abbreviations 'a.m.' and 'p.m.' to indicate the time of the day, whether it is morning or afternoon and evening.</p> <p>Focus on units of time, such as seconds and minutes.</p> <p>Solve problems that include finding durations of, and differences between, times.</p> <p>Explore calendars and calculating time intervals in weeks and days.</p>	<p>Measurement - Time</p> <p>Problem Solving</p>	<p>3Mt1 Suggest and use suitable units to measure time and know the relationships between them (second, minute, hour, day, week, month, year).</p> <p>3Mt2 Read the time on analogue and digital clocks, to the nearest 5 minutes on an analogue clock and to the nearest minute on a digital clock.</p> <p>3Mt3 Begin to calculate simple time intervals in hours and minutes.</p> <p>3Mt4 Read a calendar and calculate time intervals in weeks or days.</p> <p>3Pt1 Choose appropriate mental strategies to carry out calculations.</p> <p>3Pt2 Begin to understand everyday systems of measurement in [length, weight, capacity and] time and use these to make measurements as appropriate.</p> <p>3Pt10 Estimate and approximate when calculating, and check working.</p> <p>3Pt11 Make a sensible estimate for the answer to a calculation, e.g. using rounding.</p> <p>3Pt12 Consider whether an answer is reasonable.</p> <p>3Ps1 Make up a number story to go with a calculation, [including in the context of money.]</p> <p>3Ps2 Explain a choice of calculation strategy and show how the answer was worked out.</p>			<p>Some learners may struggle to tell the time when it involves finding 'to' times and converting these from analogue to digital times and vice-versa.</p> <p>Finding time durations and differences can be a problem for some learners, who may think that they can simply add for durations or subtract for difference.</p> <p>Time is a measurement that does not use metric units.</p>

TIME UNIT 18 ASSESSMENT – 18TH JUNE