

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE P1:
Pupil shows a reflex response to sensory stimuli.	Pupil remains passive or shows no observable response.	Pupil shows resistance or negative response to sensory stimuli, <i>e.g. withdraws hand or grimaces to show displeasure.</i>	Pupil changes facial expression or body position in response to tactile or visual stimuli, <i>e.g. lights going on and off, or body tapping to a number rhythm.</i>	Pupil accepts adult physical prompting during an activity.	P1 (i) Pupils encounter activities and experiences. They may be passive or resistant. They may show simple reflex responses, for example, startling at sudden noises or movements. Any participation is fully prompted.
Pupil demonstrates awareness by any observable response, <i>e.g. facial expression or body movement.</i>	Pupil may briefly turn head or smile at a familiar sound or situation.	Pupil will maintain contact with a mathematical resource for a short period of time.	Pupil can locate an object presented in different positions, visual or auditory.	Pupil responds to a familiar activity by an occasional response, <i>e.g. vocalisation.</i>	P1 (ii) Pupils show emerging awareness of activities and experiences. They may have periods when they appear alert and ready to focus their attention on certain people, events, objects or parts of objects, for example, grasping objects briefly when they are placed in their hand. They may give intermittent reactions, for example, sometimes showing surprise at the sudden presence or absence of an event or object.

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	P1(i) e	0.15	✓✓	P1(i) d	0.30	✓✓✓	P1(i) c	0.45	✓✓✓✓	P1(i) b	0.60	✓✓✓✓✓	P1(i) a	0.75
✓	P1(ii) e	0.90	✓✓	P1(ii) d	1.05	✓✓✓	P1(ii) c	1.20	✓✓✓✓	P1(ii) b	1.35	✓✓✓✓✓	P1(ii) a	1.50

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE P2:
Pupil begins to respond consistently when well known actions or activities are repeated.	Pupil can locate an object presented in different positions.	Pupil begins to interact consistently to familiar people and activities.	Pupil accepts partial prompting to engage in exploring new activities.	Pupil can track objects as they are being counted, <i>e.g. visual or auditory tracking.</i>	P2 (i) Pupils begin to respond consistently to familiar people, events and objects. They react to new activities and experiences, for example, becoming excited or alarmed when a routine is broken. They begin to show interest in people, events and objects, for example, tracking objects briefly across their field of awareness. They accept and engage in coactive exploration, for example, lifting objects briefly towards the face in shared investigations.
Pupil can reach for or look at objects as they are counted.	Pupil will show interest during a block building activity, <i>e.g. build the tower, and then will reach out and knock it down.</i>	Pupil can explore objects by touch, banging them, moving them, dropping them, etc.	Pupil will continue an action or interaction with an adult by repeating, <i>e.g. pupil responds with 'a' sound when you say 'a'; when their hand is placed on a drum and they feel the vibration of a drum beat, they 'tap' the drum in response.</i>	When shown a switch activated toy, the pupil can operate it, with intention, over short periods of time.	P2 (ii) Pupils begin to be proactive in their interactions. They communicate consistent preferences and affective responses, for example, showing a desire to hold a favourite object. They recognise familiar people, events and objects, for example, looking towards their own lunch box when offered a selection. They perform actions, often by trial and improvement, and they remember learned responses over short periods of time, for example, repeating an action with a familiar item of equipment. They cooperate with shared exploration and supported participation, for example, handling and feeling the texture of objects passed to them.

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	P2(i) e	1.65	✓✓	P2(i) d	1.8	✓✓✓	P2(i) c	1.95	✓✓✓✓	P2(i) b	2.1	✓✓✓✓✓	P2(i) a	2.25
✓	P2(ii) e	2.4	✓✓	P2(ii) d	2.55	✓✓✓	P2(ii) c	2.7	✓✓✓✓	P2(ii) b	2.85	✓✓✓✓✓	P2(ii) a	3

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE P3:
Pupil can remove a cloth to find a hidden object or look towards the floor for an object which has been dropped.	Pupil pushes items towards adult or pulls adult's hand towards them, as a means of requesting more of a specific activity.	Pupil will intentionally transfer objects from one hand to another. Pupil will explore objects in increasingly complex ways, using more than one action, <i>e.g. tapping, turning, shaking, rolling, etc.</i>	Pupil can remember a learned response from day to day (as opposed to remembering daily routines).	Pupil will observe the result of their own actions with interest. Pupil can move their hand in a tray of textured balls and watches their hand with interest, or will listen to/watch the result of a switch activated operation.	P3 (i) Pupils begin to communicate intentionally. They seek attention through eye contact, gesture or action. They request events or activities, for example, pushing an item of equipment towards a member of staff. They participate in shared activities with less support. They sustain concentration for short periods. They explore materials in increasingly complex ways, for example, banging or rubbing objects together. They observe the results of their own actions with interest, for example, as they throw or drop objects on to different surfaces. They remember learned responses over more extended periods, for example, remembering how to activate a pop-up object from a previous lesson.
Pupil intentionally initiates an activity by gaining adult attention, <i>e.g. pupil brings a cup to demonstrate they want a drink, or vocalises and points, or eye points.</i>	Pupil recognises some items and shows their use, <i>e.g. puts a spoon into their mouth, a hairbrush onto their head, etc.</i>	Pupil shows preference by choosing one item from a choice of two.	Pupil will respond to options and choices by accepting and rejecting, <i>e.g. shaking the head, pushing an item away or intentionally discarding an item.</i>	Pupil can participate in accumulated games by manipulating objects into piles, groups or stacking them.	P3 (ii) Pupils use emerging conventional communication. They greet known people and may initiate interactions and activities, for example, dropping objects to prompt interventions from adults. They can remember learned responses over increasing periods of time and may anticipate known events, for example, collecting coats and bags at the end of the school day. They may respond to options and choices with actions or gestures, for example, pointing to or giving one object rather than another. They actively explore objects and events for more extended periods, for example, manipulating objects in piles, groups or stacks. They apply potential solutions systematically to problems, for example, using items of equipment purposefully and appropriately.

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	P3(i) e	3.2	✓✓	P3(i) d	3.4	✓✓✓	P3(i) c	3.6	✓✓✓✓	P3(i) b	3.8	✓✓✓✓✓	P3(i) a	4
✓	P3(ii) e	4.2	✓✓	P3(ii) d	4.4	✓✓✓	P3(ii) c	4.6	✓✓✓✓	P3(ii) b	4.8	✓✓✓✓✓	P3(ii) a	5

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE P4 AND P5:
Pupil can participate in rhymes at an appropriate point, with occasional prompts, <i>e.g. by pressing a single switch, by indicating with finger pointing or eye pointing to the next in a sequence.</i>	Pupil can begin to anticipate the ending or key elements of rhymes, songs and number games.	Pupil follows a sequence as indicated by an adult, <i>e.g. the sequence of the rhythm of counting as in a rhyme, or a sequence of pictures used to show a simple rhyme, 5 frogs as they jump off the log.</i>	Pupil can use a finger to indicate 'one'.	Pupil can during rhymes, songs and number games indicate through sign, speech or gesture the next action following a prompt, <i>e.g. when singing 5 green bottles the child can indicate the next bottle to be removed.</i>	P4 Pupils show an awareness of number activities and counting, for example, copying some actions during number rhymes, songs and number games, following a sequence of pictures or numbers as indicated by a known person during number rhymes and songs.
Pupil demonstrates awareness of contrasting quantities where there is a marked difference, <i>e.g. one cake and lots of cakes on plates.</i>	Pupil can join in by saying, signing or indicating at least one of the numbers in familiar rhymes, stories, games and practical activities.	Pupil can indicate one or two by copying an adult, <i>e.g. puts up just one or both hands.</i>	Pupil can demonstrate some understanding of the sequence of numbers by joining in with the counting in familiar rhymes, songs, stories and practical activities.	Pupil can show and name one finger then show another and name the quantity as two.	P5 Pupils respond to and join in with familiar number rhymes, stories, songs and games, for example, using a series of actions during the singing of a familiar song; joining in by saying, signing or indicating at least one of the numbers in a familiar number rhyme. Pupils can indicate one or two, for example, by using eye pointing, blinks, gestures or any other means to indicate one or two, as required. They demonstrate that they are aware of contrasting quantities, for example, one and lots by making groups of one or lots of food items on plates

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	P4e	5.2	✓✓	P4d	5.4	✓✓✓	P4c	5.6	✓✓✓✓	P4b	5.8	✓✓✓✓✓	P4a	6
✓	P5e	6.4	✓✓	P5d	6.8	✓✓✓	P5c	7.2	✓✓✓✓	P5b	7.6	✓✓✓✓✓	P5a	8

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE P6 AND P7:
Pupil can recognise the numerals 1 and 2 during a range of activities.	Pupil can rote count to 5. Pupil can join in with counting in new songs, stories and games which contain a repetitive counting element.	Pupil can recognise the numerals 1, 2 and 3 during a range of activities.	Pupil can use numbers to 5 in familiar activities and games. Pupil can use 'one to one' correspondence when pairing objects, <i>e.g. put a straw in each carton of milk, put a spoon in each cup.</i> Pupil can demonstrate an understanding of the concept of more, <i>e.g. a child giving out cups has not got one for each child and indicates they need 'more'.</i>	Pupil can count 3 objects reliably when presented in a line. Pupil can make sets of up to 3 objects, <i>e.g. count 3 pencils, count 3 pens etc.</i> Pupil can relate numerals 1, 2 and 3 to the number of objects. Pupil understands that the last number in a count represents the number of objects in a set.	P6 Pupils demonstrate an understanding of one-to-one correspondence in a range of contexts, for example, matching objects such as cups to saucers, straws to drink cartons. Pupils join in rote counting up to five, for example, saying or signing number names to 5 in counting activities. They count reliably to three, make sets of up to three objects and use numbers to three in familiar activities and games, for example, touching one, two, three items as an adult counts, counting toys or pictures, counting out sets of three, e.g. knife, fork and spoon. They demonstrate an understanding of the concept of more, for example, they indicate that more cups, counters, food items are required. They join in with new number rhymes, songs, stories and games.
Pupil can count at least 5 objects reliably when presented in a line. Make sets of up to 5 using objects, <i>e.g. count 5 cups, count 5 straws, etc.</i> Pupil can relate numerals 1-5 to the number of objects.	Pupil can join in with rote counting to 10.	Pupil can count reliably at least 5 objects when randomly placed on the table, <i>e.g. pupil orders objects to count.</i> Pupil can respond appropriately to the question 'How many?' when working with numbers up to 5.	Pupil can recognise numerals from 1-5. Pupil demonstrates an understanding of less, <i>e.g. indicating which plate has less biscuits on it.</i> Pupil can, in practical situations, respond appropriately to 'add one', <i>e.g. add one more sweet to the dish.</i>	Pupil can recognise numerals 1 to 5 and relate each numeral to the correct quantity, understanding that numeral always represents that quantity. Pupil can match the pattern on a dice to the numeral.	P7 Pupils join in rote counting to 10, for example, saying or signing number names to 10 in counting activities. They can count at least 5 objects reliably, for example, candles on a cake, bricks in a tower. They recognise numerals from one to five and understand that each represents a constant number or amount, for example, putting correct number of objects (1-5) into containers marked with the numeral; collecting the correct number of items up to five. Pupils demonstrate an understanding of less, for example, indicating which bottle has less water in it. In practical situations they respond to add one to a number of objects, for example, responding to requests such as add one pencil to the pencils in the pot, add one sweet to the dish.

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	P6e	8.4	✓✓	P6d	8.8	✓✓✓	P6c	9.2	✓✓✓✓	P6b	9.6	✓✓✓✓✓	P6a	10
✓	P7e	11	✓✓	P7d	12	✓✓✓	P7c	13	✓✓✓✓	P7b	14	✓✓✓✓✓	P7a	15

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE P8:
Pupil can rote count to beyond ten, e.g. 11, 12.	<p>Pupil can use the vocabulary of first, second, third and last when describing the position of people or objects or the order of events.</p> <p>Pupil can count up to ten objects reliably when randomly placed on the table, e.g. <i>pupil orders objects to count.</i></p>	<p>Pupil can recognise numerals 1 to 9 when represented in order and randomly.</p> <p>Pupil can estimate a small number, e.g. 1, 2 or 3 and <i>check by counting.</i></p>	<p>Pupil can continue the rote count onwards from a given small number.</p> <p>Pupil can use ordinal numbers (1st, 2nd or 3rd) when describing the position of objects, people or events.</p> <p>Pupil can in practical situations add one to and take one away from a number of objects (up to 10) then say or sign how many there are now.</p>	<p>Pupil can recognise numerals 1 to 9 and relate each numeral to the correct quantity, understanding that numeral always represents that quantity.</p> <p>Pupil can compare two given numbers of objects saying which is more and which is less.</p>	<p>P8 Pupils join in with rote counting to beyond 10, for example, they say or sign number names in counting activities. They continue to rote count onwards from a given small number, for example, continue the rote count onwards in a game using dice and moving counters up to 10; continue to say, sign or indicate the count aloud when adult begins counting the first two numbers. Pupils recognise differences in quantity, for example, in comparing given sets of objects and saying which has more or less, which is the bigger group or smaller group. They recognise numerals from one to nine and relate them to sets of objects, for example, labelling sets of objects with correct numerals. In practical situations they respond to add one to or take one away from a number of objects, for example, they add one more to three objects in a box and say, sign or indicate how many are now on the box; at a cake sale say, sign or indicate how many cakes are left when one is sold. They use ordinal numbers (first, second, third) when describing the position of objects, people or events, for example, indicate who is first in a queue or line; who is first, second and third in a race or competition. Pupils estimate a small number (up to 10) and check by counting, for example, suggesting numbers that can be checked by counting, guessing then counting the number of: Pupils in a group; adults in the room; cups needed at break time.</p>

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	P8e	16	✓✓	P8d	17	✓✓✓	P8c	18	✓✓✓✓	P8b	19	✓✓✓✓✓	P8a	20

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE BRIDGE:
<p>Pupil can rote count to beyond 30. The pupil starts to count backwards as well as forwards.</p> <p>e.g. 32, 33, 34..... 15, 14, 13..... 29, 28, 27.....</p>	<p>Pupil can begin to record numbers of objects initially by making marks, progressing to simple tallying and writing numbers to 10 and beyond.</p> <p>e.g. Put the number carpet tiles 1-20 randomly on the floor . Which tile has the number 8 on it? 13? 19?</p> <p>Recognise and say numbers in the environment.</p> <p>Say the numbers 1-10 in a random order. Write the number spoken.</p> <p>Pupil can demonstrate an understanding of place value of 10s and 1s in a 2 digit number, using resources to support them if necessary. e.g. comparing two numbers up to 20, to identify the larger and smaller number.</p>	<p>Pupil understands addition as finding the total of two or more sets of objects.</p> <p>e.g. Find all the dominoes that have a total of 7.</p> <p>Show me 3 fingers on one hand and 4 fingers on the other.</p> <p>How many are you showing altogether?</p> <p>Can you give me another way of showing 7?</p> <p>Pupil can use number bonds from 1 to 5.</p> <p>e.g. partitioning the number 5 as 0+5, 1+4 etc</p>	<p>Pupil understands subtraction as taking away objects from a set and finding how many are left.</p> <p>e.g. There are 6 apples in the bowl, if 3 children take one each, how many will be left?</p> <p>There are 8 outfits in the dressing up box. If 5 outfits are being used, how many are left?</p> <p>Pupil can put up to 20 items into groups of 2 or 5 or into equal groups</p> <p>e.g. give the pupil 5 hoops and 15 objects and ask them to share them equally between the hoops.</p>	<p>Pupil can add and subtract numbers of objects to 10.</p> <p>e.g. Count 4 pennies into a purse. Show 3 more pennies in your hand. How many pennies are there in total?</p> <p>Put 8 biscuits on to a plate. Can the child take 5 away and work out how many are left?</p> <p>Pupil knows some simple addition and subtraction facts.</p> <p>e.g. Double 4, 1, 3, perhaps using fingers to support.</p> <p>Use fingers to support knowledge of number bonds for number 10.</p>	<p>PIVATS MILESTONE BRIDGE</p> <p>Pupils join in with rote counting to beyond 30, for example, they say or sign number names in counting activities. They continue to rote count onwards from a given small number, for example, continue the rote count onwards in a game using dice and moving counters up to 30 and also start to begin counting backwards within the number range 0 to 30. They recognise numerals from one to twenty and relate them to sets of objects, for example, labelling sets of objects with correct numerals. In practical situations they understand addition as finding the total of two or more sets of objects and understand subtraction as taking away objects from a set and finding how many are left. Pupils can add and subtract numbers of objects to 10 and know some simple addition and subtraction facts. Pupils can solve addition and subtraction problems involving up to 10 objects in a range of contexts.</p>

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	BRIDGEe	20.16	✓✓	BRIDGEd	20.33	✓✓✓	BRIDGEc	20.5	✓✓✓✓	BRIDGEb	20.65	✓✓✓✓✓	BRIDGEa	20.8

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE ONE:
Counting	Reading and writing numbers	Representing numbers/place value	Mathematical language	Fractions	
<p>Pupil can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. They can count in multiples of twos, fives and tens.</p> <p><i>e.g. Recite a sequence of number names in the right order forwards and backwards between any two pairs of numbers 28 and 41, 74 and 58, 93 and 104.</i></p> <p><i>Can the child say what comes next when the following numbers are recited:</i> 8, 9, 10 26, 25, 24..... 87, 88, 89.... 103, 102, 101... 0, 2, 4, 6.... 0, 5, 10, 15... 100, 90, 80....</p>	<p>Pupil can read and write numbers to 100 in numerals.</p> <p><i>e.g. Put a selection of number carpet tiles/cards 0 -100 randomly on the floor.</i></p> <p><i>Which tile has the number 37 on it? 51? 99?</i></p> <p><i>Recognise and say numbers in the environment.</i></p> <p><i>Say the numbers 0-100 in a random order. Write the number spoken in numerals.</i></p>	<p>Pupil can identify and represent numbers using objects and pictorial representations including the number line (numbers to at least 30).</p> <p><i>e.g. Put a selection of number carpet tiles/cards 0 -30 randomly on the floor. Pick a card and get the pupil to represent from a selection of resources to show tens and ones (base 10 equipment, straws- bundles of ten and ones, place value cards). Can they show the position of the number on a 1-30 number line?</i></p>	<p>Pupil can use the language of: equal to, more than, less than (fewer), most, least.</p> <p>Given a number, pupil can identify one more and one less.</p> <p><i>e.g. Using different representations of numbers (counters, objects, straws – bundles of tens and ones, base 10 apparatus, place value cards) pick two different numbers between 0 and 30 and compare two numbers and representations using the language of: equal to, more than, less than (fewer), most and least.</i></p> <p><i>What number is one more than 7, 15, 24?</i></p> <p><i>What number is one less than 6, 17 and 29?</i></p>	<p>Pupil understands that a fraction can describe a part of a whole.</p> <p><i>e.g. Show different images of fractions and get the pupil to talk about what is the same and what is different about the images.</i></p> <p><i>Show a range of shapes. Can the child distinguish which shapes have been folded into equal parts.</i></p>	<p>PIVATS MILESTONE ONE STAGE 1, MILESTONE ONE STAGE 2 AND MILESTONE ONE STAGE 3</p> <p>Pupils can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. They count in multiples of twos, fives and tens. They can read and write numbers to 100 in numerals and identify and represent numbers using objects and pictorial representations including the number line. They can use number and place value language and can identify one more and one less.</p> <p>Pupils can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. They represent and use number bonds and related subtraction facts within 20. They solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. Pupils can understand that fractions can describe part of a whole and that a unit fraction represents one equal part of a whole. They recognise, find and name a half as one of two equal parts and a quarter as one of four equal parts of an object, shape or quantity (including measure). Pupils can sort objects and numbers to a given criterion and their own. They can present and interpret data in block diagrams using practical equipment. They can ask and answer simple questions by counting the number of objects in each category and by comparing categorical data.</p>

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 1 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage ONE-1, any 10 indicators can combine to form a Stage ONE-2, all 15 indicators combine to form a Stage ONE-3.

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE ONE CONTINUED:
Fractions	Addition and subtraction	Addition and subtraction	Addition and subtraction	Addition and subtraction	PIVATS MILESTONE ONE STAGE 1, MILESTONE ONE STAGE 2 AND MILESTONE ONE STAGE 3
<p>Pupil recognises, finds and names a half as one of two equal parts of an object, shape or quantity (<i>including measure</i>).</p> <p><i>e.g. Find the glass that is half full. Empty this cup so that there is half left. Give the pupil a square piece of card and ask them to fold in half. Repeat with other shapes. Can you make 2 equal teams from this group of 8 children?</i></p>	<p>Pupil can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. <i>e.g. Represent addition and subtraction examples using number sentences and vice-versa. I have thirteen apples and give 6 away to my friends. How many apples do I have now? How could you write this as a number sentence?</i></p> <p>Pupil understands and uses the vocabulary involved in addition and subtraction. <i>e.g. Including 'sum', 'add', 'plus', 'total', 'one more', 'two more', 'altogether', 'minus', 'take', 'how many have gone?', 'one less', 'two less', 'leaves', 'how many are left...?'</i></p>	<p>Pupil can add and subtract one-digit and two-digit numbers to 20, including zero (<i>using concrete objects and pictorial representations</i>)</p> <p><i>e.g. Using concrete objects and pictorial representations e.g. counters, cubes, bead strings, ten frames, number lines, pupil works out the following calculations:</i> $17 - 3 =$ $13 + 5 =$ $10 + 7 =$ $12 - 4 =$ $7 + 5 =$ $9 + 7 =$ $6 + 8 =$</p>	<p>Pupil can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.</p> <p><i>e.g. Work out the missing numbers in the following number sentences. Can you 'tell a story' to match the number sentences?</i> $6 + \square = 17$ $15 = 20 - \square$ $18 - \square = 13$ $\square + \triangle = 14$</p>	<p>Pupil represents and uses number bonds and related subtraction facts within 20.</p> <p><i>e.g. How many different ways can you show the 12 spots on this ladybird?</i> <i>I have a 20p coin and buy a pencil for 12p. What change will I get?</i> <i>I have 9 stickers and need 15 before I can get a head teacher's award. How many more stickers do I need?</i></p>	<p>Pupils can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. They count in multiples of twos, fives and tens. They can read and write numbers to 100 in numerals and identify and represent numbers using objects and pictorial representations including the number line. They can use number and place value language and can identify one more and one less.</p> <p>Pupils can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. They represent and use number bonds and related subtraction facts within 20. They solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. Pupils can understand that fractions can describe part of a whole and that a unit fraction represents one equal part of a whole. They recognise, find and name a half as one of two equal parts and a quarter as one of four equal parts of an object, shape or quantity (<i>including measure</i>). Pupils can sort objects and numbers to a given criterion and their own. They can present and interpret data in block diagrams using practical equipment. They can ask and answer simple questions by counting the number of objects in each category and by comparing categorical data.</p>

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 1 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage ONE-1, any 10 indicators can combine to form a Stage ONE-2, all 15 indicators combine to form a Stage ONE-3.

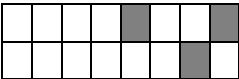
PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE ONE CONTINUED:
Multiplication and division	Doubling and halving	Money	Handling data	Handling data	<p>PIVATS MILESTONE ONE STAGE 1, MILESTONE ONE STAGE 2 AND MILESTONE ONE STAGE 3</p> <p>Pupils can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. They count in multiples of twos, fives and tens. They can read and write numbers to 100 in numerals and identify and represent numbers using objects and pictorial representations including the number line. They can use number and place value language and can identify one more and one less.</p> <p>Pupils can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. They represent and use number bonds and related subtraction facts within 20. They solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. Pupils can understand that fractions can describe part of a whole and that a unit fraction represents one equal part of a whole. They recognise, find and name a half as one of two equal parts and a quarter as one of four equal parts of an object, shape or quantity (<i>including measure</i>). Pupils can sort objects and numbers to a given criterion and their own. They can present and interpret data in block diagrams using practical equipment. They can ask and answer simple questions by counting the number of objects in each category and by comparing categorical data.</p>
<p>Pupil can solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. e.g. Use a selection of resources to support pupils in answering questions such as: Four hands, how many fingers? Five 10p coins, how much money? Twelve shoes, how many pairs of shoes? Count in 5's to 20. How many 5's have you counted? Three rows of two eggs. How many eggs? Can you show this as an array?</p>	<p>Pupil can recall and use doubles of all numbers to 10 and corresponding halves. e.g. Ask doubling and halving questions Double 8, 6, 3, 9... Halve 20, 14, 10, 4... I have seven pairs of shoes. How many individual shoes will I have? I have twelve grapes and I want to share them equally with my friend. How many will we have each? The domino is a double six. How many spots does it have?</p>	<p>Pupil can recognise and know the value of different denominations of coins and notes. e.g. Show different coins and notes for pupils to recognise and explain their value. Give a selection of coins for pupils to sort and to explain why they have sorted them in a certain way e.g. all the copper, silver and gold coins; coins less than 10p, more than 10p.</p>	<p>Pupil can sort objects, numbers and shapes to a given criterion and their own. e.g. Sort familiar objects, numbers and shapes in a variety of simple ways, e.g. lists, tables, hoops, sorting trays.</p>	<p>Pupil can present and interpret data in block diagrams using practical equipment and ask and answer questions about the data. e.g. Pupils collect information and organise it into simple block graphs e.g. to identify the most common eye colour, pupils line up in rows or make cube towers of the same colour (4 brown, 3 green, 7 blue). Answer questions such as 'How many children have brown eyes?', 'How many more children have blue eyes than green eyes.'</p>	

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 1 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage ONE-1, any 10 indicators can combine to form a Stage ONE-2, all 15 indicators combine to form a Stage ONE-3.

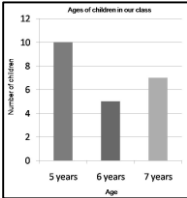
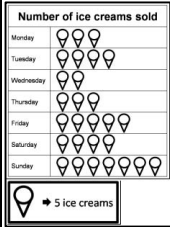
Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	ONE-1e	21	✓✓	ONE-1d	22	✓✓✓	ONE-1c	23	✓✓✓✓	ONE-1b	24	✓✓✓✓✓	ONE-1a	25
✓✓✓✓✓	ONE-2e	26	✓✓✓✓✓	ONE-2d	27	✓✓✓✓✓	ONE-2c	28	✓✓✓✓✓	ONE-2b	29	✓✓✓✓✓	ONE-2a	30
✓✓✓✓✓	ONE-3e	31	✓✓✓✓✓	ONE-3d	32	✓✓✓✓✓	ONE-3c	33	✓✓✓✓✓	ONE-3b	34	✓✓✓✓✓	ONE-3a	35

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE TWO:																				
Counting and sequencing	Representing, comparing and rounding numbers	Place value and partitioning	Addition and subtraction	Fractions																					
<p>Pupil can count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. Pupil can find 1 or 10 more or less than a given number.</p> <p>Pupil can describe and extend simple sequences involving counting on or back in different steps.</p> <p>e.g. Find 1 more and 1 less and then 10 more and 10 less of the following numbers: 13, 36, 52, 64, 71, 99, 102</p> <p>Write the next numbers in these sequences: 10, 15, 20, 25, __, __ 14, 12, 10, 8, __, __ 0, 3, 6, 9, 12, __, __ 63, 73, 83, 93, __, __ 107, 97, 87, 77, __, __</p>	<p>Pupil can identify, represent and estimate numbers using different representations, including the number line.</p> <p>Pupil can compare and order numbers from 0 up to 100; and use <, > and = signs.</p> <p>Pupil can round numbers to at least 100 to the nearest 10.</p> <p>e.g. Show different amounts using counters, straws (bundles of tens and ones), base 10 equipment, place value cards and money (10p and 1p coins). Ask the pupil to estimate the amount shown and then check by counting. Can the pupil position the number on an unmarked 0 – 100 number line.</p> <p>Put a selection of number carpet tiles/cards 0 -100 randomly on the floor. Pick a card and get the pupil to represent from a selection of resources to show tens and ones (base 10 equipment, straws-bundles of ten and ones, place value cards).</p> <p>Can the pupil show the position of the number on a 0-100 number line? Can they compare two numbers and say which is the largest/smallest? Select five numbers from 0 – 100 and put them in order from smallest to largest. Explain how you have done this.</p> <p>Place the sign <, > and = in the empty box to make these correct:</p> <p>16 <input type="text"/> 93 47 <input type="text"/> 24 60 <input type="text"/> 32 65 <input type="text"/> 60 + 5</p> <p>Which of these numbers round to 40? 43, 46, 33, 44, 38. How do you know?</p> <p>Round these numbers to the nearest 10: 18, 57, 93, 85, 104, 118.</p>	<p>Pupil can recognise the place value of each digit in a two-digit number (tens, ones).</p> <p>Pupil can partition numbers in different ways (e.g. 23 = 20 + 3 and 23 = 10 + 13)</p> <p>e.g. Write a number in the empty box to make these correct: 96 = <input type="text"/> + 6 96 = 80 + <input type="text"/> <input type="text"/> = 50 + 3 <input type="text"/> = 40 + 17</p> <p>Write a number with 6 tens and 3 ones? 4 tens and 9 ones? 1 ten and 5 ones?</p> <p>How many tens are there in the number eighty two? 51? 30?</p>	<p>Pupil can add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none">- a two-digit number and ones- a two-digit number and tens- two two-digit numbers- adding three one- digit numbers <p>e.g. Use base 10 equipment, bead string, a number line or mental skills to calculate:</p> <table><tr><td>46 + 3</td><td>46 - 3</td></tr><tr><td>46 + 20</td><td>46 - 20</td></tr><tr><td>46 + 23</td><td>46 - 23</td></tr><tr><td>32 + 11</td><td>13 - 8</td></tr><tr><td>68 + 5</td><td>52 - 7</td></tr><tr><td>76 + 7</td><td>35 - 9</td></tr><tr><td>24 + 9</td><td>73 - 19</td></tr><tr><td>64 + 19</td><td></td></tr><tr><td>5 + 8 + 5</td><td></td></tr><tr><td>6 + 9 + 4</td><td></td></tr></table>	46 + 3	46 - 3	46 + 20	46 - 20	46 + 23	46 - 23	32 + 11	13 - 8	68 + 5	52 - 7	76 + 7	35 - 9	24 + 9	73 - 19	64 + 19		5 + 8 + 5		6 + 9 + 4		<p>Pupil understands that a fraction can describe part of a set.</p> <p>Also that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be.</p> <p>e.g. If a quarter of my sticker collection has ten stickers, how many stickers has my full collection?</p> <p>Would you rather have a $\frac{1}{4}$ of a cake or a $\frac{1}{3}$ of the same sized cake? Support your answer with drawings to explain your decision.</p>	<p>PIVATS MILESTONE TWO STAGE 1, MILESTONE TWO STAGE 2 AND MILESTONE TWO STAGE 3</p> <p>Pupils can count in steps of 2, 3 and 5 from 0 and in tens from any number forward and backward. They can recognise the place value of each digit in a two-digit number (tens, ones) and can compare and order numbers from 0 up to 100. They can partition numbers in different ways and can find 1 or 10 more or less than a given number.</p> <p>Pupils can add and subtract numbers using concrete objects, pictorial representations and mentally. They recognise and use the inverse operation between addition and subtraction and use this to check calculations and solve missing number problems. They understand multiplication as repeated addition and arrays and understand division as sharing and grouping. They recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. Pupils can understand that fractions can describe part of a set and understand that the larger the denominator is the more pieces it is split into and therefore the smaller each part will be. They recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. Pupils can interpret and construct simple pictograms, tally charts, block diagrams and simple tables. They can ask and answer questions about totalling and comparing categorical data.</p>
46 + 3	46 - 3																								
46 + 20	46 - 20																								
46 + 23	46 - 23																								
32 + 11	13 - 8																								
68 + 5	52 - 7																								
76 + 7	35 - 9																								
24 + 9	73 - 19																								
64 + 19																									
5 + 8 + 5																									
6 + 9 + 4																									

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 2 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage TWO-1, any 10 indicators can combine to form a Stage TWO-2, all 15 indicators combine to form a Stage TWO-3.

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE TWO CONTINUED:
Fractions	Addition and subtraction	Addition and subtraction	Multiplication and division	Multiplication and division	
<p>Pupil recognises, finds, names and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, and $\frac{3}{4}$ of a length, shape, set of objects or quantity.</p> <p><i>e.g. Adrian has a set of 12 pencils. How many is: half of the set? a quarter of the set? three quarters of the set? a third of the set?</i></p> <p><i>If there are 24 cherries and they are shared equally between two people, how many cherries will each person get? What if there are 4 people? What if there are 3 people?</i></p> <p><i>Shade more squares so that exactly half of the shape is shaded:</i></p>  <p><i>Show a number of partly shaded shapes. Which shapes have more than a quarter, a third or a half of them shaded?</i></p> <p><i>Have a selection of different lengths, such as string or ribbon and get the pupil to show you a quarter, a third or a half of the length.</i></p>	<p>Pupil recognises and uses the inverse relationship between addition and subtraction and uses this to check calculations and solve missing number problems.</p> <p><i>e.g. Using the numbers 15, 9 and 6, make related number sentences by using +, - and = signs.</i></p> <p><i>Twenty five children are on the bus. Six children get off and six children get on. How many children are on the bus now?</i></p>	<p>Pupil can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</p> <p><i>e.g. If $2 + 8 = 10$, what is $20 + 80$? What do you need to add to 70 to make 100? $80 - 60 = 20 + \square$ $7 + 3 = 6 + \square$ Write the total: $6 + 5 + 5 + 4 =$ Explain how you worked out the answer.</i></p> <p><i>Warren bought two fruits. He spent 30p altogether. He bought an orange for 21p, what did he pay for the other fruit?</i></p>	<p>Pupil calculates mathematical statements for multiplication (using repeated addition) and division within the multiplication tables and writes them using the multiplication (x), division (\div) and equals (=) signs.</p> <p>Pupil recalls and uses multiplication and division facts for the 2, 5 and 10 multiplication tables.</p> <p><i>e.g. David has three 5p coins in his purse. Write a calculation to show how much money he has. Write the missing number in the empty box to make these calculations correct:</i></p> <p>$\square \times 5 = 60$ $\square \div 2 = 8$ $5 \times 2 = 10 \times \square$ $40 \div 5 = \square$ $\square = 7 \times 2$ $\square \times \triangle = 20$</p>	<p>Pupil solves problems involving multiplication and division (including those with remainders), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p> <p><i>e.g. There are seven apples in each bag. Mr Jones buys 2 bags of apples. How many apples does he buy? Mrs Patel waters the garden. She uses 8 watering cans of water. Each watering can holds 5 litres of water. How many litres of water does she use altogether? There are 30 children in a class. They sit on round tables with five children at each table. How many tables are there? Balloons are sold in packs of 10. Alex needs 27 balloons for his party. How many packs does he need to buy?</i></p>	<p>PIVATS MILESTONE TWO STAGE 1, MILESTONE TWO STAGE 2 AND MILESTONE TWO STAGE 3</p> <p>Pupils can count in steps of 2, 3 and 5 from 0 and in tens from any number forward and backward. They can recognise the place value of each digit in a two-digit number (tens, ones) and can compare and order numbers from 0 up to 100. They can partition numbers in different ways and can find 1 or 10 more or less than a given number.</p> <p>Pupils can add and subtract numbers using concrete objects, pictorial representations and mentally. They recognise and use the inverse operation between addition and subtraction and use this to check calculations and solve missing number problems. They understand multiplication as repeated addition and arrays and understand division as sharing and grouping. They recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. Pupils can understand that fractions can describe part of a set and understand that the larger the denominator is the more pieces it is split into and therefore the smaller each part will be. They recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. Pupils can interpret and construct simple pictograms, tally charts, block diagrams and simple tables. They can ask and answer questions about totalling and comparing categorical data.</p>

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 2 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage TWO-1, any 10 indicators can combine to form a Stage TWO-2, all 15 indicators combine to form a Stage TWO-3.

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE TWO CONTINUED:
Multiplication and division	Doubling and halving	Money	Handling data	Handling data	
<p>Pupil understands multiplication as repeated addition and arrays and division as sharing and grouping and that a division calculation can have a remainder.</p> <p><i>e.g. show by repeated addition and an array how you could work out the following problem: Each child has 5 stickers and there are 6 children, how many stickers are there altogether?</i></p> <p><i>Using practical equipment show how you could work out the following calculations:</i></p> <p>$12 \div 3 =$ $10 \div 2 =$ $16 \div 5 =$</p> <p><i>Have you shown sharing or grouping?</i></p>	<p>Pupil can derive and use doubles and halves of simple two-digit numbers. They understand halving as a way of 'undoing' doubling and vice versa.</p> <p><i>e.g. When I doubled a number the answer was 18. Which number did I double?</i></p> <p><i>There are 28 children in a class. Half of them are girls, how many are boys?</i></p> <p><i>Write the missing number:</i></p> <p>$4 \rightarrow$ double and add 5 $\rightarrow 13$ $7 \rightarrow$ double and add 5 $\rightarrow \square$</p> <p>Double 20, 42, 34, 53</p> <p>Halve 16, 24, 42, 68</p>	<p>Pupil finds different combinations of coins that equal the same amounts of money and combine amounts to make a particular value.</p> <p>Pupil solves simple problems involving money.</p> <p><i>e.g. Give a selection of coins for pupils to sort and match in different ways and to give explanations for their matching, e.g. 10p coin matched with 10 x 1p coins or 5 x 2p coins, or 2 x 5p coins etc</i></p> <p><i>How many different ways can you pay exactly for an item costing 12p?</i></p> <p><i>A lollipop costs 15p. How much will I have to pay for two lollipops? What money could I use to buy the lollipops?</i></p>	<p>Pupil sorts objects and classifies them using more than one criterion,</p> <p><i>e.g. Sort a given set of shapes using two criteria such as triangle/not triangle and green/not green.</i></p>	<p>Pupil understands vocabulary relating to statistics and can communicate their findings, using simple pictograms, tally charts, block diagrams and simple tables. The pupil can ask and answer questions about totalling and comparing categorical data.</p> <p><i>e.g. Class 2 made a graph:</i></p> <div><p><i>How many children are 7 years old? What is the total number of children in the class? How many more children are 5 years old than 6 years old?</i></p></div> <div><p><i>A shop sold 10 ice creams on Wednesday. How many ice creams were sold on Friday? How many more ice creams were sold on Sunday than on Tuesday?</i></p></div>	<p>PIVATS MILESTONE TWO STAGE 1, MILESTONE TWO STAGE 2 AND MILESTONE TWO STAGE 3</p> <p>Pupils can count in steps of 2, 3 and 5 from 0 and in tens from any number forward and backward. They can recognise the place value of each digit in a two-digit number (tens, ones) and can compare and order numbers from 0 up to 100. They can partition numbers in different ways and can find 1 or 10 more or less than a given number. Pupils can add and subtract numbers using concrete objects, pictorial representations and mentally. They recognise and use the inverse operation between addition and subtraction and use this to check calculations and solve missing number problems. They understand multiplication as repeated addition and arrays and understand division as sharing and grouping. They recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. Pupils can understand that fractions can describe part of a set and understand that the larger the denominator is the more pieces it is split into and therefore the smaller each part will be. They recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$. Pupils can interpret and construct simple pictograms, tally charts, block diagrams and simple tables. They can ask and answer questions about totalling and comparing categorical data.</p>

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 2 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage TWO-1, any 10 indicators can combine to form a Stage TWO-2, all 15 indicators combine to form a Stage TWO-3.

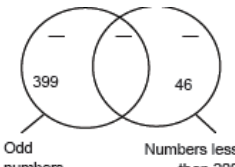
Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	TWO-1e	36.5	✓✓	TWO-1d	38	✓✓✓	TWO-1c	39.5	✓✓✓✓	TWO-1b	41	✓✓✓✓✓	TWO-1a	42.5
✓✓✓✓✓ ✓	TWO-2e	44	✓✓✓✓✓ ✓✓	TWO-2d	45.5	✓✓✓✓✓ ✓✓✓	TWO-2c	47	✓✓✓✓✓ ✓✓✓✓	TWO-2b	48.5	✓✓✓✓✓ ✓✓✓✓✓	TWO-2a	50
✓✓✓✓✓ ✓✓✓✓✓ ✓	TWO-3e	52	✓✓✓✓✓ ✓✓✓✓✓ ✓✓	TWO-3d	54	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓	TWO-3c	56	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓	TWO-3b	58	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓	TWO-3a	60

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE THREE:
Counting and sequencing	Representing, comparing and ordering	Place value and partitioning	Place value and fractions/decimals	Fractions	
<p>Pupil can count from 0 in multiples of 4, 8, 50 and 100. Pupil can find 1, 10 or 100 more or less than a given number.</p> <p>Pupil can describe and extend number sequences involving counting on or back in different steps.</p> <p>e.g. Find 1 more and 1 less, 10 more and 10 less and then 100 more and 100 less of the following numbers: 123, 254, 306, 699, 811</p> <p>Find the next two numbers: 279, 282, 285, __, __ Find the missing numbers: __, 535, 525, 515, __, __</p>	<p>Pupil can identify, represent and estimate numbers using different representations, including the number line.</p> <p>Pupil can compare and order numbers up to 1000. Pupil can round numbers to at least 1000 to the nearest 10 or 100.</p> <p>e.g. Show different amounts using straws (bundles of hundreds, tens and ones), base 10 equipment, place value cards and money (£1, 10p and 1p coins). Ask the pupil to estimate the amount shown and then check by counting. Can the pupil position the number on an unmarked 0 – 1000 number line. Put a selection of number cards 0 – 1000 randomly on the table. Pick a card and get the pupil to represent from a selection of resources to show hundreds, tens and ones (base 10 equipment, straws- bundles of hundreds, tens and ones, place value cards).</p> <p>Can the pupil show the position of the number on a 0-1000 number line? Can they compare two numbers and say which is the largest/smallest? Select five numbers from 0 – 1000 and ask the pupil to put them in order from smallest to largest or largest to smallest. Ask them to explain how they have done this.</p> <p>Place the sign <, > and = in the empty box to make these correct:</p> <p>165 <input type="text"/> 561 470 <input type="text"/> 407 760 <input type="text"/> 895 – 135 945 <input type="text"/> 900 + 50 + 5</p> <p>Which of these numbers round to 600? 551, 650, 649, 585, 520. How do you know?</p>	<p>Pupil can recognise the place value of each digit in a three-digit number (hundreds, tens, ones).</p> <p>Pupil can partition numbers in different ways (e.g. 146 = 100 + 40 + 6 and 146 = 130 + 16)</p> <p>e.g. Write a number in the empty box to make these correct: 195 = 100 + <input type="text"/> + 5 195 = 180 + <input type="text"/> <input type="text"/> = 300 + 50 + 3 <input type="text"/> = 600 + 226</p> <p>Write a number with: 5 hundreds, 6 tens and 4 ones? 70 tens and 9 ones? 2 hundreds and 52 ones?</p>	<p>Pupil recognises that tenths arise from dividing objects into 10 equal parts and dividing one-digit numbers or quantities by 10.</p> <p>Pupil can count up and down in tenths.</p> <p>Pupil can read and write numbers with one decimal place and compare and order numbers to one decimal place.</p> <p>e.g. What does the digit 4 represent in 17.4? Put the following in order from largest to smallest: 5.6, 5.1, 4.9, 4.5, 1.5, 6.5</p> <p>Write a number that has two tens and 5 tenths? Write a number that is bigger than 2 but smaller than 3? Can you explain what makes it bigger than 2 but smaller than 3?</p>	<p>Pupil understands that finding a fraction of an amount relates to division.</p> <p>Pupil recognises, finds and writes fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</p> <p>e.g. A chocolate bar has 15 pieces. I give $\frac{1}{3}$ of the bar to a friend. How many pieces of chocolate do I have left?</p> <p>What calculation would you do to find $\frac{1}{5}$ of 25? What is $\frac{3}{4}$ of 16?</p> <p>There are 24 sweets in a tube. $\frac{1}{4}$ of them are red, $\frac{1}{3}$ of them are orange. The rest are yellow. How many sweets are yellow?</p>	<p>PIVATS MILESTONE THREE STAGE 1, MILESTONE THREE STAGE 2 AND MILESTONE THREE STAGE 3</p> <p>Pupils can count in multiples of 4, 8, 50 and 100. They can read and write numbers up to 1000 and numbers with one decimal place. They can recognise the place value of each digit in a three-digit number (hundreds, tens, ones) and can identify the value of each digit to one decimal place. They can compare and order numbers up to 1000 and can find 1, 10 or 100 more or less than a given number. Pupils can add and subtract numbers mentally and numbers with up to three digits, using formal written methods of columnar addition and subtraction. They recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. They write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, using mental and progressing to formal written methods. Pupils understand that finding a fraction of an amount relates to division and recognise and show, using diagrams, equivalent fractions with small denominators. They can add and subtract fractions with the same denominator within one whole. Pupils can interpret and present data using bar charts, pictograms and tables. They solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.</p>

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 3 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage THREE-1, any 10 indicators can combine to form a Stage THREE-2, all 15 indicators combine to form a Stage THREE-3.

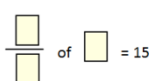
PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE THREE CONTINUED:															
Fractions	Addition and subtraction	Addition and subtraction	Place value and multiplication	Multiplication and division																
<p>Pupil recognises and shows, using diagrams, equivalent fractions with small denominators.</p> <p><i>e.g. Suggest fractions that are smaller than $\frac{1}{2}$. Explain how you know. Take a sheet of paper. Fold it in half, in half again and in half again. Open up the sheet and colour in 2 sections. What fraction of the paper have you shaded? Can you find two ways of writing the fraction?</i></p>	<p>Pupil can add and subtract numbers mentally, including:</p> <ul style="list-style-type: none">- a three-digit number and ones- a three-digit number and tens- a three digit number and hundreds <p>Pupil recalls and uses addition and subtraction facts for 100 (multiples of 5 and 10).</p> <p>Pupil understands and uses take away and difference for subtraction, deciding on the most efficient method for the numbers involved, irrespective of context.</p> <p><i>e.g. Use mental skills to calculate:</i></p> <table><tr><td>163 + 7</td><td>209 - 6</td></tr><tr><td>278 + 6</td><td>595 - 8</td></tr><tr><td>152 + 40</td><td>284 - 50</td></tr><tr><td>478 + 50</td><td>636 - 70</td></tr><tr><td>517 + 300</td><td>327 - 200</td></tr><tr><td>133 + 49</td><td>284 - 59</td></tr><tr><td>60 + 50 + 40</td><td>105 - 96</td></tr><tr><td>13 + 18 + 13</td><td>300 - 87</td></tr><tr><td>65 + \square = 100</td><td>100 - \square = 85</td></tr></table>	163 + 7	209 - 6	278 + 6	595 - 8	152 + 40	284 - 50	478 + 50	636 - 70	517 + 300	327 - 200	133 + 49	284 - 59	60 + 50 + 40	105 - 96	13 + 18 + 13	300 - 87	65 + \square = 100	100 - \square = 85	<p>Pupil can add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</p> <p><i>e.g. Here are some cards with numbers on them:</i></p> <div><div>222</div><div>999</div></div> <p><i>Use five of the number cards to make this calculation correct.</i></p> <div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><</div>
163 + 7	209 - 6																			
278 + 6	595 - 8																			
152 + 40	284 - 50																			
478 + 50	636 - 70																			
517 + 300	327 - 200																			
133 + 49	284 - 59																			
60 + 50 + 40	105 - 96																			
13 + 18 + 13	300 - 87																			
65 + \square = 100	100 - \square = 85																			

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 3 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage THREE-1, any 10 indicators can combine to form a Stage THREE-2, all 15 indicators combine to form a Stage THREE-3.

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE THREE CONTINUED:																																												
Multiplication and division	Money	Handling data	Handling data	Handling data	PIVATS MILESTONE THREE STAGE 1, MILESTONE THREE STAGE 2 AND MILESTONE THREE STAGE 3 Pupils can count in multiples of 4, 8, 50 and 100. They can read and write numbers up to 1000 and numbers with one decimal place. They can recognise the place value of each digit in a three-digit number (hundreds, tens, ones) and can identify the value of each digit to one decimal place. They can compare and order numbers up to 1000 and can find 1, 10 or 100 more or less than a given number. Pupils can add and subtract numbers mentally and numbers with up to three digits, using formal written methods of columnar addition and subtraction. They recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. They write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, using mental and progressing to formal written methods. Pupils understand that finding a fraction of an amount relates to division and recognise and show, using diagrams, equivalent fractions with small denominators. They can add and subtract fractions with the same denominator within one whole. Pupils can interpret and present data using bar charts, pictograms and tables. They solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.																																												
Pupil recalls and uses multiplication and division facts for the 3, 4 and 8 multiplication tables. Pupil understands that division is the inverse of multiplication and vice versa. Pupil solves problems, including missing number problems, involving multiplication and division (and interpreting remainders). <i>e.g. Write the missing number in the empty box to make these calculations correct:</i> $\square \times 3 = 36$ $\square \div 4 = 8$ $5 \times 8 = 10 \times \square$ $48 \div 8 = \square$ $\square = 8 \times 7$ $\square \times \square = 24$ $64 \div \square = \square \times 4$ <i>There are 33 children here today. How many teams of 8 can we make?</i> <i>If there are twenty-six sweets in a pack and four children, how many sweets will they each get? How many will be left?</i> <i>Circle each number which has a remainder of 1 when divided by 3:</i> 26, 13, 25, 37, 31, 23.	Pupil can recognise and use the symbols for pounds (£) and pence (p) and understand that the decimal point separates pounds/pence. Pupil recognises that ten 10p coins equal £1 and that each coin is $\frac{1}{10}$ of £1. Pupil adds and subtracts amounts of money to give change, using both £ and p in practical contexts. <i>e.g. Which is greater £3.84 or 348p? Why?</i> <i>Can you explain what the 6 represents in £6.10, £3.62, £0.46, 625p, 67p?</i> <i>How many 10p coins would you get for £2.10, £0.70, £1.3?</i> <i>A CD costs £5.40. You buy two CDs. What change would you get from a £20 note?</i> <i>Look at these amounts</i> £80.08, £80.80, £8.80, £8.08 <i>write them in order, least to most.</i>	Pupil can use Venn and Carroll diagrams to sort and classify information, <i>e.g. Fill in three missing numbers:</i>  <i>Which number is in the wrong place on the Carroll diagram?</i> <table border="1" data-bbox="831 686 1086 839"><thead><tr><th></th><th>Odd</th><th>Not odd</th></tr></thead><tbody><tr><td>Multiple of 3</td><td>3</td><td>18</td></tr><tr><td></td><td>43</td><td>24</td></tr><tr><td>Not multiple of 3</td><td>13</td><td>14</td></tr><tr><td></td><td>23</td><td>28</td></tr></tbody></table>		Odd		Not odd	Multiple of 3	3	18		43	24	Not multiple of 3	13	14		23	28	Pupil can extract and interpret information presented in simple tables and lists, <i>e.g. What is most/least popular?</i> <i>This table shows the marks some children got in their spelling tests:</i> <table border="1" data-bbox="1108 507 1384 611"><thead><tr><th></th><th>Test 1</th><th>Test 2</th><th>Test 3</th><th>Test 4</th></tr></thead><tbody><tr><td>Joanne</td><td>8</td><td>9</td><td>4</td><td>10</td></tr><tr><td>Matthew</td><td>7</td><td>7</td><td>7</td><td>7</td></tr><tr><td>Tatshat</td><td>8</td><td>7</td><td>8</td><td>9</td></tr><tr><td>Kevin</td><td>6</td><td>7</td><td>8</td><td>9</td></tr><tr><td>Izzy</td><td>9</td><td>6</td><td>9</td><td>8</td></tr></tbody></table> <i>Who scores the most marks on test 1? How many more marks did Joanne score on test 1 than test 3? How many marks did Tatshat score in all four tests?</i>		Test 1	Test 2	Test 3	Test 4	Joanne	8	9	4	10	Matthew	7	7	7	7	Tatshat	8	7	8	9	Kevin	6	7	8	9	Izzy	9	6	9	8
	Odd	Not odd																																															
Multiple of 3	3	18																																															
	43	24																																															
Not multiple of 3	13	14																																															
	23	28																																															
	Test 1	Test 2	Test 3	Test 4																																													
Joanne	8	9	4	10																																													
Matthew	7	7	7	7																																													
Tatshat	8	7	8	9																																													
Kevin	6	7	8	9																																													
Izzy	9	6	9	8																																													

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 3 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage THREE-1, any 10 indicators can combine to form a Stage THREE-2, all 15 indicators combine to form a Stage THREE-3.

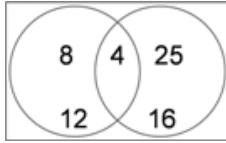
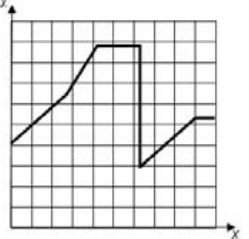
Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	THREE-1e	60.7	✓✓	THREE-1d	61.3	✓✓✓	THREE-1c	62	✓✓✓✓	THREE-1b	62.7	✓✓✓✓✓	THREE-1a	63.3
✓✓✓✓✓ ✓	THREE-2e	64	✓✓✓✓✓ ✓✓	THREE-2d	64.15	✓✓✓✓✓ ✓✓✓	THREE-2c	64.3	✓✓✓✓✓ ✓✓✓✓	THREE-2b	64.45	✓✓✓✓✓ ✓✓✓✓✓	THREE-2a	64.6
✓✓✓✓✓ ✓✓✓✓✓ ✓	THREE-3e	64.75	✓✓✓✓✓ ✓✓✓✓✓ ✓✓	THREE-3d	64.9	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓	THREE-3c	65.05	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓	THREE-3b	65.2	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓	THREE-3a	65.35

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE FOUR:
Counting and sequencing	Representing, comparing and rounding	Place value and partitioning	Place value and fractions/decimals	Fractions	PIVATS MILESTONE FOUR STAGE 1, MILESTONE FOUR STAGE 2 AND MILESTONE FOUR STAGE 3 Pupils can count in multiples of 6, 7, 9, 25 and 100 and can count backwards through zero to include negative numbers. They can read and write numbers to at least 10 000 and numbers with up to two decimal places. They can recognise the place value of each digit in a four-digit number and can identify the value of each digit to two decimal places. They can compare and order numbers beyond 1000 and can find 0.1, 1, 10, 100 or 1000 more or less than a given number. Pupils can add and subtract mentally combinations of two and three digit numbers and decimals to one decimal place, and numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate. They recall and use multiplication and division facts for multiplication tables up to 12 x 12. They multiply two-digit and three-digit numbers by a one-digit number using formal written layout and divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. Pupils recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators. They recognise and show, using diagrams, families of common equivalent fractions and recognise and write decimal equivalents of any number of tenths and hundredths. Pupils can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, time graphs.
<p>Pupil can count in multiples of 6, 7, 9, 25 and 1000.</p> <p>Pupil can count backwards through zero to include negative numbers.</p> <p>Pupil can find 0.1, 1, 10, 100 or 1000 more or less than a given number.</p> <p>Pupil can describe and extend number sequences involving counting on or back in different steps, including sequences with multiplication and division steps.</p> <p><i>e.g. Continue the count:</i> 4, 3, 2, __, __, __ 8, 6, 4, __, __, __ 7, 3, -1, __, __, __</p> <p><i>What number(s) changes when you add or subtract 0.1 to the following numbers:</i> 64.2, 125.8, 2568.7</p> <p><i>Explain why this happens.</i></p> <p><i>This sequence follows the rule 'to get the next number, add the two previous numbers'. Write the next two numbers in the sequence:</i> 1.3, 1.4, 2.7, 4.1, __, __.</p> <p><i>Find the next two numbers:</i> 2, 4, 8, __, __ 25, 16, 9, __, __</p> <p><i>The numbers in this sequence increase by the same amount each time. Write in the missing numbers:</i> 1, __, __, 25</p>	<p>Pupil can identify, represent and estimate numbers using different representations, including the number line.</p> <p>Pupil can order and compare numbers beyond 1000.</p> <p>Pupil can round any number to the nearest 10, 100 or 1000.</p> <p><i>e.g. Position numbers on an unmarked 0 – 1000 number line and beyond. Also position negative numbers on a -10 to +10 number line.</i></p> <p><i>Compare two numbers to 10 000 and say which is the largest/smallest.</i></p> <p><i>Place the sign <, > and = in the empty box to make these correct:</i> 1759 <input type="text"/> 1795 4700 <input type="text"/> 4070 3500 <input type="text"/> 3970 - 450 9145 <input type="text"/> 9000 + 100 + 45</p> <p><i>Which of these numbers round to 4000:</i> 3651, 4026, 4630, 3498</p> <p><i>How do you know?</i></p>	<p>Pupil can recognise the place value of each digit in a four-digit number and can identify the value of each digit to two decimal places.</p> <p>Pupil can partition numbers in different ways (e.g. 2.3=2+0.3 and 1+1.3)</p> <p>Pupil can round decimals (one decimal place) to the nearest whole number.</p> <p><i>e.g. Write a number in the empty box to make these correct:</i> 3197 = <input type="text"/> + 100 + <input type="text"/> + 7 4285 = 4100 + <input type="text"/> <input type="text"/> = 8300 + 60 + 7 <input type="text"/> = 1000 + 5026 6.4 = <input type="text"/> + 2.4 <input type="text"/> = 9 + 1.7</p> <p><i>Write a number with:</i> 5 thousands, 7 tens, 3 tenths and 4 hundredths? 70 hundreds and 9 tens? 3 thousands, 50 tens and 7 tenths?</p> <p><i>Round the following numbers to the nearest whole number:</i> 6.7, 3.2, 5.4, 7.5, 9.9</p>	<p>Pupil recognises that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</p> <p>Pupil can count up and down in hundredths.</p> <p>Pupil can read and write numbers with up to two decimal places and order and compare numbers with the same number of decimal places up to two decimal places.</p> <p><i>e.g. What does the digit 6 represent in 1243.46?</i></p> <p><i>Put the following in order from largest to smallest:</i> 5.62, 5.16, 4.83, 4.05, 1.67, 6.52</p> <p><i>Write a number that has four tens and 3 tenths and 2 hundredths?</i></p> <p><i>Write a number that is bigger than 3.1 but smaller than 3.2? Can you explain what makes it bigger than 3.1 but smaller than 3.2?</i></p>	<p>Pupil recognises, finds and writes fractions of a discrete set of objects including those with a range of numerators and denominators.</p> <p>Pupil adds and subtracts fractions with the same denominator (using diagrams).</p> <p><i>e.g. What is $\frac{3}{5}$ of 40?</i> <i>What is three tenths of 60?</i> <i>Find different ways to complete:</i></p> <div style="text-align: center;">  </div> <p><i>Calculate the following:</i> $\frac{3}{5} + \frac{1}{5} =$ $\frac{5}{8} - \frac{3}{8} =$</p>	

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 4 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage FOUR-1, any 10 indicators can combine to form a Stage FOUR-2, all 15 indicators combine to form a Stage FOUR-3.

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE FOUR CONTINUED:
Fractions	Addition and subtraction	Addition and subtraction	Multiplication and division	Multiplication and division	PIVATS MILESTONE FOUR STAGE 1, MILESTONE FOUR STAGE 2 AND MILESTONE FOUR STAGE 3
<p>Pupil recognises and shows, using diagrams, families of common equivalent fractions.</p> <p>Pupil recognises and writes decimal equivalents of any number of tenths or hundredths.</p> <p><i>e.g. Andrew makes a fraction using two number cards. He says, 'My fraction is equivalent to $\frac{3}{4}$'. One of the number cards is 6. What would the other number be? Show how you know by using diagrams.</i></p> <p><i>What is the decimal equivalent for:</i> $\frac{6}{10}, \frac{17}{100}, \frac{75}{100}, \frac{7}{10}, \frac{1}{2}$</p>	<p>Pupil can add and subtract mentally combinations of two and three digit numbers and decimals to 1 decimal place.</p> <p>Pupil can recall and use addition and subtraction facts for 100 and for multiples of 100 totalling 1000.</p> <p><i>e.g. Use mental skills to calculate:</i> $267 + \square = 300$ $1000 = \square + 600$ $1000 - \square = 350$ $230 + 450$ $370 - 240$ $153 + 340$ $573 - 410$ $325 + 143$ $653 - 232$ $84 + 38$ $132 - 45$ $6 + 13 + 14 + 5$ $17 + 8 - 7$ $28 + 75$ $74 + 37$ $84 - 38$ $87 + 64$ $104 - 26$ $4.3 + 5.4$ $3.7 - 2.4$</p>	<p>Pupil can add and subtract numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate.</p> <p><i>e.g.</i> $\begin{array}{r} 467 \\ + 258 \\ \hline \end{array}$</p> <p>$\begin{array}{r} 645 \\ - 387 \\ \hline \end{array}$</p>	<p>Pupil recalls multiplication and division facts for multiplication tables up to 12 x 12.</p> <p>Pupil solves problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, division (including interpreting remainders) and integer scaling problems.</p> <p><i>e.g. Write the missing number in the empty box to make these calculations correct:</i> $8 \times \square = 56$ $\square \div 9 = 9$ $6 \times 8 = \square \div 2$ $132 \div 12 = \square$ $\square \times \triangle = 84$ $144 \div \square = \triangle \times 4$ $28 \times 7 = \square$ $14 \times 6 = \square$ <i>If you multiply me by 7 and add 4 you will get 46. What number am I?</i> <i>Write some division calculations that have the answer 7 remainder 2.</i> <i>How do you do this?</i></p>	<p>Pupil can multiply two-digit and three-digit numbers by a one-digit number using a formal written layout.</p> <p>Pupil can divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.</p> <p><i>e.g.</i> $245 \times 8 =$ $378 \div 6 =$ $222 \div 7 =$ $\square \div 9 = 76$ $22 \times \square = 1100$</p>	<p>Pupils can count in multiples of 6, 7, 9, 25 and 100 and can count backwards through zero to include negative numbers. They can read and write numbers to at least 10 000 and numbers with up to two decimal places. They can recognise the place value of each digit in a four-digit number and can identify the value of each digit to two decimal places. They can compare and order numbers beyond 1000 and can find 0.1, 1, 10, 100 or 1000 more or less than a given number. Pupils can add and subtract mentally combinations of two and three digit numbers and decimals to one decimal place, and numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate. They recall and use multiplication and division facts for multiplication tables up to 12 x 12. They multiply two-digit and three-digit numbers by a one-digit number using formal written layout and divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. Pupils recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators. They recognise and show, using diagrams, families of common equivalent fractions and recognise and write decimal equivalents of any number of tenths and hundredths. Pupils can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, time graphs.</p>

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 4 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage FOUR-1, any 10 indicators can combine to form a Stage FOUR-2, all 15 indicators combine to form a Stage FOUR-3.

PIVATS PERFORMANCE INDICATORS:					PIVATS MILESTONE FOUR CONTINUED:
Calculation strategies	Doubling and halving	Money	Handling data	Handling data	PIVATS MILESTONE FOUR STAGE 1, MILESTONE FOUR STAGE 2 AND MILESTONE FOUR STAGE 3
<p>Pupil can choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)</p> <p><i>e.g. Kerry thinks of a number. She multiplies it by 3 and subtracts 5. Her answer is 16. What is her original number?</i> <i>e.g. $1286 + 394 + 21 = 3002 - 1995 = 12.2 - \square = 5.7$</i> $5 \square 7 + 28 \square = 823$ $345 \times 8 =$ $485 \div 5 =$ $33 \times \square = 3300$ $147 \div 7 =$ $\square \div 6 = 84$ $20 + \square = \square + 4$ $31.2 - \square = 27.3$</p>	<p>Pupil can use partitioning to double and halve any number, including decimals to one decimal place.</p> <p><i>e.g. What is half: 6.4, 1270, 9.8, 6322?</i> <i>What is double: 12.4, 3520, 4.7, 2468</i></p>	<p>Pupil can write amounts of money using decimal notation. Pupil recognises that one hundred 1p coins equal £1 and that each coin is $\frac{1}{100}$ of £1.</p> <p>Pupil solves problems involving money.</p> <p><i>e.g. Write the following amounts of money using decimal notation: Four pounds and thirty six pence Six pounds and seven pence Ten pounds and eighteen pence</i></p> <p><i>1 adult and 2 children go to the swimming baths. Adult tickets cost £2.90 and child tickets cost £1.40. How much change will they get from a £10 note?</i></p>	<p>Pupil uses a variety of sorting diagrams to compare and classify numbers based on their properties and sizes.</p> <p><i>e.g. pupils to sort different numbers according to their properties using a variety of sorting diagrams. Give examples where the pupils have to fill in the labels of the sorting diagrams too. Identify the missing headings for each section of the Venn diagram.</i></p> 	<p>Pupil can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, time graphs.</p> <p><i>e.g. What kind of graph or chart will you use to represent this data? Using a range of holiday brochures, compare the different weather patterns (temperature and rainfall) in a variety of countries. Create three different questions that could be answered from the graph.</i></p> <p><i>Tell the story of this line graph in the context of:</i> a) The water level in a bath b) An elevator in a tall building</p> 	<p>Pupils can count in multiples of 6, 7, 9, 25 and 100 and can count backwards through zero to include negative numbers. They can read and write numbers to at least 10 000 and numbers with up to two decimal places. They can recognise the place value of each digit in a four-digit number and can identify the value of each digit to two decimal places. They can compare and order numbers beyond 1000 and can find 0.1, 1, 10, 100 or 1000 more or less than a given number. Pupils can add and subtract mentally combinations of two and three digit numbers and decimals to one decimal place, and numbers with up to 4 digits and decimals with one decimal place using the formal written methods of columnar addition and subtraction where appropriate. They recall and use multiplication and division facts for multiplication tables up to 12 x 12. They multiply two-digit and three-digit numbers by a one-digit number using formal written layout and divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. Pupils recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators. They recognise and show, using diagrams, families of common equivalent fractions and recognise and write decimal equivalents of any number of tenths and hundredths. Pupils can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, time graphs.</p>

Please turn the page to view the rest of the indicators a child needs to complete to achieve Milestone 4 for this PIVATS aspect (15 in total). Any 5 indicators can combine to form a Stage FOUR-1, any 10 indicators can combine to form a Stage FOUR-2, all 15 indicators combine to form a Stage FOUR-3.

Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score	Number of PIVATS steps achieved:	PIVATS milestone equivalent:	PIVATS score
✓	FOUR-1e	65.5	✓✓	FOUR-1d	65.65	✓✓✓	FOUR-1c	65.8	✓✓✓✓	FOUR-1b	65.95	✓✓✓✓✓	FOUR-1a	66.1
✓✓✓✓✓ ✓	FOUR-2e	66.25	✓✓✓✓✓ ✓✓	FOUR-2d	66.4	✓✓✓✓✓ ✓✓✓	FOUR-2c	66.55	✓✓✓✓✓ ✓✓✓	FOUR-2b	66.7	✓✓✓✓✓ ✓✓✓✓✓	FOUR-2a	67.2
✓✓✓✓✓ ✓✓✓✓✓ ✓	FOUR-3e	67.7	✓✓✓✓✓ ✓✓✓✓✓ ✓✓	FOUR-3d	68.2	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓	FOUR-3c	68.7	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓	FOUR-3b	69.3	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓	FOUR-3a	70