Multiples - Answers

Key Stage 2: 2003 Paper A

1.

| 16 | Award **TWO** marks for all three numbers correct as shown:

a multiple of 9   `2` `7` **OR** `7` `2`

a square number   `2` `5`

a factor of 96   `1` `2`

If the answer is incorrect, award **ONE** mark for two numbers correct. | *Up to 2m* | |

Key Stage 2: 2004 Paper B

1.

| 6 | An explanation which recognises that a multiple of 5 can end in 0 as well as 5, eg

■ 'Because 10 is a multiple of 5';
■ 'Because it can end in 0';
■ 'Because some numbers end in 0'. | *1m*
(U1) | *No mark is awarded for circling 'No' alone.*

Do not *accept vague or arbitrary answers, eg*

■ *'Because not all multiples of 5 end in 5'.*

If 'Yes' is circled but a correct, unambiguous explanation is given, then award the mark. |

Key Stage 2: 2005 Paper A

1.

2	One of the following triples: 11, 12, 17 13, 18, 19 11, 13, 16 14, 17, 19 11, 14, 15 15, 16, 19 12, 13, 15 15, 17, 18	1m	Accept alternative unambiguous indications, eg ticks, crosses. **Do not** award the mark if fewer or more than three numbers are circled.

Key Stage 2: 2006 Paper B

1.

13a	Any odd numbered multiple of 10, ie 10 **OR** 30 **OR** 50 **OR** 70 **OR** 90 **OR** any number ending with any of the pairs of digits above.	1m	
13b	An explanation which recognises that all multiples of 20 are also multiples of 10, eg: ■ 'Because all the numbers in the 20 times table are also in the 10 times table' ■ 'Because all multiples of 20 are multiples of 10' ■ 'Because 20 is in the 10 times table' ■ 'All multiples of 20 go in box A because 10 goes into them' ■ '20 is a multiple of both 20 and 10, and so is 40, 60, etc' ■ 'Because if it's not a multiple of 10, it can't be a multiple of 20' ■ 'Because if it is a multiple of 20, it has to be a multiple of 10' ■ 'Because 10 is a factor of 20'.	1m (U1)	**Do not** accept vague or arbitrary explanations, eg: ■ 'Because 40 is a multiple of 10' ■ 'Because they would be in box A instead' ■ 'Because all the multiples of 10 are multiples of 20' ■ 'Because 10 is a multiple of 20'.

Key Stage 2: 2007 Paper A

1.

15a	A multiple of 12 which ends in '8', eg 48 **OR** 108 **OR** 168 **OR** 228 **OR** 288	*1m*	
15b	An explanation which recognises that an odd number cannot be a multiple of 4, eg: ■ 'A multiple of 4 cannot be odd' ■ 'All multiples of 4 are even' ■ 'An odd number cannot be a multiple of 4' ■ 'Multiples of 4 must end in 0, 2, 4, 6 or 8' ■ '4, 8, 12, 16, 20, 24 don't end in 3'.	*1m* (U1)	***Do not*** *accept vague or incomplete explanations, eg:* ■ *'3 is not a multiple of 4'* ■ *'3 is too small'* ■ *'4 is even and 3 is an odd number'* ■ *'13, 23, 33 and 43 are not multiples of 4'* ■ *'A number which ends in 3 cannot be a multiple of 4'* ■ *'3 isn't in the 4 times table'* ■ *'4 doesn't go into any number that ends in 3'.*

Key Stage 2: 2008 Paper B

1.

9	Diagram completed as shown:	*1m*	*Accept recognisable misspellings.* *Accept 'odd' for 'not even'.* *Accept alternative unambiguous indications, eg lines drawn from the labels to the appropriate parts of the diagram.*

	multiples of 9	not multiples of 9
even	72 54	56 84
not even	63 45	49 75

Key Stage 2: 2008 Paper B

2.

22	Award **TWO** marks for the correct answer of 8010	Up to 2m	Accept 178 for **TWO** marks.
	If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg:	(U1)	Accept for **ONE** mark 7965 **OR** 177 as evidence of appropriate method.
	■ 8000 ÷ 45 = wrong number then wrong number rounded to the nearest whole number		
	OR		
	■ a 'trial and improvement' method, eg		A 'trial and improvement' method must show evidence of improvement.
	150 × 45 = 6750		Answer need not be obtained for the award of **ONE** mark.
	200 × 45 = 9000		
	175 × 45 = 7875		

Key Stage 2: 2009 Paper A

1.

12	An explanation which gives a counter-example to illustrate that not all numbers ending in 4 are multiples of 4, eg:	1m	No mark is awarded for circling 'No' alone.
	■ '14 is not a multiple of 4'	(U1)	**Do not** accept vague or incomplete explanations, eg:
	■ '4, 24 and 44 are multiples of 4, but not 14 and 34'		■ 'Some numbers end in a 4 but aren't multiples of 4'
	■ '14 or 34 don't work'		■ '16 doesn't end in 4'
	■ '54'		■ 'Not all multiples of 4 end in 4'
	OR		■ '24 is a multiple of 4 but the next one isn't'
	an explanation which recognises that only numbers ending in 4 which have an even number of tens are multiples of 4, eg:		■ '4, 8, 12, 16, 20, 24 etc'.
			If 'Yes' is circled but a correct, unambiguous explanation is given, then award the mark.
	■ 'It has to have an even number of 10s as well, like 20 or 40'		
	■ '14, 24, 34, 44, 54, 64 – only half of them are'		
	■ '4 doesn't go into 10 so 14 isn't'.		

Key Stage 2: 2010 Paper B

1.

8	Three multiples of 3, eg:	1m	Multiples may be given in any order.
	3 6 2 4 5 7	U1	Digits may be in either order, eg 24 **OR** 42
	OR		**Do not** accept digits used more than once.
	6 3 7 2 5 4		**Do not** accept digits other than those shown.

Key Stage 2: 2012 Paper A

1.

16	Award **TWO** marks for all four numbers correctly placed as shown:	Up to 2m	Accept alternative unambiguous indications, eg lines drawn from the numbers to the appropriate regions of the diagram.
	multiples of 2, multiples of 4, 12, 10, 11, 13		**Do not** accept numbers written in more than one region.
	If the answer is incorrect, award **ONE** mark for three numbers correctly placed.		
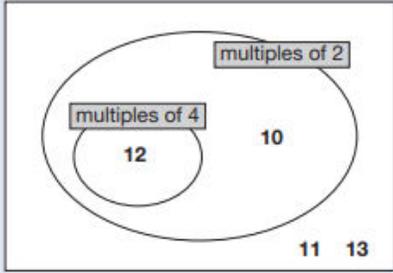
Key Stage 2: 2013 Paper B

1.

24	Award **TWO** marks for the correct answer of 378	Up to 2m	
	If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, eg:	U1	Answer need not be obtained for the award of **ONE** mark.
	■ 366 369 372 375 378 381		
	364 371 378 385		
	OR		
	■ Factorisation/calculator method, eg		
	7 × 3 = 21		
	21 × 18		

Key Stage 2: 2015 Paper B

1.

| 13 | Award **TWO** marks for the correct answer as shown:

51

52

50

48

49

If the answer is incorrect, award **ONE** mark for 4 true statements with no number repeated (within those 4), eg:

48   **OR**   (blank)
52   52
50   50
51   48
49   49 | Up to 2m

(U1) | **Do not** accept numbers other than those given.

(Multiple of 3 can be 48 **OR** 51)

(Multiple of 4 can be 48 **OR** 52) |

Key Stage 2: 2016 Paper 2 Reasoning - Sample

1.

| 7 | Award **TWO** marks for three rows completed correctly as shown:

50

(120) **OR** 140 **OR** 160 **OR** 180

(210) **OR** 240 **OR** 270

(320) **OR** 360

If the answer is incorrect, award **ONE** mark for two rows correct. | Up to 2m | |

Key Stage 2: 2016 Paper 3 Reasoning - Sample

1.

1	Award **TWO** marks for three boxes completed correctly, e.g.	Up to 2m	Accept more than one correct multiple in any box.
			Do not accept any box containing a correct multiple and an incorrect number.

	multiple of 5	**not** a multiple of 5
multiple of 3	30	**3, 6, 9 etc**
not a multiple of 3	**5, 10, 20 etc**	**1, 2, 4, 7 etc**

If the answer is incorrect, award **ONE** mark for at least two boxes completed correctly.

Key Stage 2: 2016 Paper 2 Reasoning

1.

14	24 **AND** 48 only	1m	Numbers may be given in either order.

Key Stage 2: 2017 Paper 3 Reasoning

1.

3	95 × 6 **OR** 96 × 5	1m	