



DEEPENING UNDERSTANDING ANSWER SHEET

YEAR 5 PIM – MULTIPLES

Fluency 1

42, 20, 88, 72, 32, 12, 60, 4

A multiple is the product of one number multiplied by another number.

Fluency 2

	Multiple of 8	Not a multiple of 8
Multiple of 6	24, 48, 72, 96 etc.	6, 12, 18, 30, 36, 42, 54, 60, 66 etc.
Not a multiple of 6	8, 16, 32, 40, 56, 64, 80, 88 etc.	Any number that isn't a multiple of either e.g. 1, 2, 3, 4, 5, 7, 9, 10, 11, 13, 14, 15, 17, 19, 20 etc.

Fluency 3

$$15 + 16 + 17 = 48$$

$$19 + 20 + 21 = 60$$

Fluency 4

Any multiple of 10 will also be a multiple of 2/5.

Any multiple of 24 will also be a multiple of 2/3/4/6/8/12.

Any multiple of 35 will also be a multiple of 5/7.



Reasoning 1

Modelled DAB Reasoning Responses

D – The statement is False.

A – Multiples of 3 will not always be multiples of 9, Darcey has got it the wrong way round. Multiples of 9 are always multiples of 3.

B – Children will pick numbers to prove this e.g. 3 and 6 are multiples of 3 as they are in the 3 times table, however they are not multiples of 9. They could demonstrate that the statement is correct if written the other way round e.g. 9, 18, 27 are all multiples of 9 and multiples of 3 also.

Reasoning 2

Modelled DAB Reasoning Response

D – 28 is in the incorrect place.

A – It should go in the middle of the Venn diagram because it is both a multiple of 4 and 7.

B – $4 \times 7 = 28$, therefore 28 is a multiple of both 4 and 7.

Reasoning 3

Modelled DAB Reasoning Response

D – This statement is always true.

A – Multiples of 8 are all even.

B – Write out the multiples of 8 to demonstrate how there is always an even number in the ones column. Perhaps children could try a larger multiplication calculation to prove this statement.



Reasoning 4

Modelled DAB Reasoning Response

D – Asha is wrong.

A – 75 is not a multiple of 13 so although it is odd and has two digits, it cannot be Millie's number.

B – Children should write out the multiples of 13 to help them select the correct number. The correct answer is 65.

Download our 'DAB' posters to support reasoning in your classroom:

<https://www.deepeningunderstanding.co.uk/product/dab-reasoning-posters/>

Problem Solving 1

Multiples of 7 are: 7, 14, 21, 28, 35, 42, 49, 56, 63, 72, 84, 91, 98, 105.

Multiples of 6 are: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102.

it could be 49 or 91

Problem Solving 2

There are 4 possible answers:

Caleb's number could be: 9, 21, 33, 45

