



DEEPENING UNDERSTANDING ANSWER SHEET

YEAR 3/4 PIM – 100s, 10s and 1s.

Fluency 1

The number is 454.

There are four hundreds, five tens and four ones.

Fluency 2

The number could be displayed using Dienes:

H	T	O

or place value counters:

H	T	O

Fluency 3

Number	H	T	O
348			
569			
605			



Fluency 4

The value of the digit 4 is four.

The value of the digit 7 is seventy.

The value of the digit 2 is two hundred.

The value of the digit 7 is seven.

Reasoning 1

Modelled DAB Reasoning Responses

D – False

A – The hundreds value in 763 and 963 is not the same.

B – The tens digits have the same value in these numbers (both 6 tens) and the ones digits also have the same value (both 3 ones) but the hundreds digits are different. In 763 there are 7 hundreds and in 963 there are 9 hundreds.

Reasoning 2

Modelled DAB Reasoning Response

D – Ranjit has made a mistake.

A – 230 was not the 2nd largest number he could make using the digits provided.

B – Ranjit was correct with 974, as this is the largest number you can make. However, the next largest number he can make with the digits that are left is 320

Reasoning 3

Modelled DAB Reasoning Response

D – The number is 395.

A – The other two numbers would not fit with all the clues provided.

B – Looking at clue 1 'All of my digits are odd', we can dismiss the number 639 as 6 is an even number. We then need to use the other clues to work out if it is 573 or 395. From clue 2 we cannot dismiss either of the other numbers as the



tens are greater than the ones in both numbers. We have to look at the last clue 'The ones digit is a multiple of 5' to find out that the only option is 395 as 5 is a multiple of 5. We can dismiss 573 as 3 is not a multiple of 5. Therefore, the number is 395.

Reasoning 4

Modelled DAB Reasoning Response

D – I agree with Marlon

A – There are 11 tens in 118.

B – I know this is correct because there are 10 tens in 100 so in 110 there will be 11 tens.

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

Problem Solving 1

For the first number there are 3 possibilities:

224, 225 or 226

For the second number there are 10 possibilities:

151, 152, 153, 154

251, 252, 253

351, 352

451

For the third number there is only 1 possibility:

721

Problem Solving 2

There are 2 possible numbers:

920 or 366

