



DEEPENING UNDERSTANDING ANSWER SHEET

YEAR 5 PIM – PRIME NUMBERS

Fluency 1

A prime number only has two factors.

Numbers with more than two factors are called composite numbers.

Fluency 2

Answers could include:

Prime	Composite
47	15
29	33
17	21
5	6

Fluency 3

77

Fluency 4

$11 - 7 = 4$

Reasoning 1

Pupils

Modelled DAB Reasoning Responses

D – Asha is correct.



A – 2 is a prime number.

B – A prime number has 2 factors – 1 and itself. The number 2 has the factors 1 and 2.

Reasoning 2

Modelled DAB Reasoning Response

D – Sometimes

A – Some prime numbers end in 3 or 7.

B – The numbers 3, 7, 13 and 17 are all prime numbers however 5, 11 and 19 are also prime numbers and they do not end in 3 or 7. The numbers 33 and 77 are not prime numbers even though they end in 3 and 7.

Reasoning 3

Modelled DAB Reasoning Response

D – The middle section between prime and composite will be empty.

A – A number cannot be both prime and composite.

B – A prime number is a number which has two factors. A composite number must have more than two factors.

Reasoning 4

Modelled DAB Reasoning Response

D – Alfie is not correct.

A – The numbers 1 and 0 are not prime numbers.

B – A prime number is a number which has two factors. 1 and 0 only have themselves as a factor.

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

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



Problem Solving 1

Answers could include:

709, 683, 41, 5, 2

701, 463, 89, 5, 2

607, 839, 41, 5, 2

601, 829, 43, 5, 7

503, 89, 67, 41, 2

487, 601, 59, 3, 2

467, 103, 89, 5, 2

461, 307, 89, 5, 2

431, 809, 67, 5, 2

409, 683, 71, 5, 2

401, 829, 67, 5, 3

Problem Solving 2

START

2	6	100	28	35	48	72	22
17	53	37	36	66	92	85	87
40	64	3	81	74	8	91	20
55	12	41	15	21	44	75	51
86	39	59	19	23	14	68	84
56	18	77	4	97	25	65	16
95	90	82	27	13	5	67	43
82	62	45	10	24	88	99	89

FINISH

